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RESEARCH STUDIES
of the
STATE COLLEGE OF WASHINGTON

EDITOR-IN-CHIEF

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CONTENTS

ALLEN, DON CAMERON	A Text from Nashe on the Latin Literature of the Sixteenth Century	205
AVERY, EMMETT L.	Vaudeville on the London Stage, 1700-1737	65
BASS, HAROLD J	The Policy of the American State Department toward Missionaries in the Far East	179
BEDARD, WILLIAM DELLES	Biology and Control of the Douglas-Fir Beetle <i>Dendroctonus Pseudotsugae</i> Hopkins (Coleoptera - Scolytidae) with Notes on Associated Insects	103
BLINN, HAROLD E	Henry VIII and the Imperial Election of 1519	23
BOTTING, ROLAND B	The Making of the <i>Shepherd's Calendar</i>	43
BOWMAN, FRANCIS J	The Creation and Dissolution of the Danish-Swedish Alliance of 1628	129
BURNETT, GROVER	The Effect of Certain Potato and Tobacco Viruses on Tomato Plants	219
CLAYPOOL, LAWRENCE LEONARD	A Study of Certain Reactions of the Apple to Soil Moisture and Meteorological Conditions	78
CLIFMENTS, HARRY F	Studies in Drought Resistance of the Soy Bean	1
CLEMENTS, HARRY F	Studies in Drought Resistance of the Sunflower and the Potato	81
FENDRICK, PAUL	Language of Institutional Delinquents	17
GERRITZ, HAROLD W	The Utilization of Apple Waste and Preparation of New Products from Apples	204
JOHNSON, LEROY P V	Physiological and Genetical Studies on Delayed Germination in <i>Avena</i>	101
KIRK, ROY C	Decomposition Potentials of Fused Salts	79
LARSON, CARL A	The Effects of Continued Application of Irrigation Water and Commercial Fertilizers to Ephrata Fine Sand in the Wenatchee Orchard District	22
MCELDERRY, B R, JR.	Browning and the Victorian Public in 1868-69	193
MCELDERRY, B R, JR.	Byron's Interest in the Americas	145
RUEHLE, GEO D	Fungi Which Cause Decay of Apples in Cold Storage	99
SCHWARTZ, CHESTER DRUSE	Rest Period Responses and Cold Resistance in the Red Raspberry in Relation to the Breeding of Hardy Varieties	42

SUPPLEMENT

ALLEN, DON CAMERON	A Short-Title Catalogue of English Books Prior to 1700 in the Library of the State College of Washington	107
--------------------	--	-----

RESEARCH STUDIES

of the

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Vols. IV and V:

See page 222

March, 1937

RESEARCH STUDIES OF THE STATE COLLEGE OF WASHINGTON



STUDIES IN DROUGHT RESISTANCE OF THE SOY BEAN: <i>Harry F. Clements</i>	- - 1
LANGUAGE OF INSTITUTIONAL DELINQUENTS: <i>Paul Fendrick</i>	- - - 17
THE EFFECT OF CONTINUED APPLICATION OF IRRIGATION WATER AND COMMERCIAL FERTILIZERS TO EPHEATA FINE SAND IN THE WENATCHEE ORCHARD DISTRICT: <i>Carl A. Larson</i>	- - - 22
HENRY VIII AND THE IMPERIAL ELECTION OF 1519: <i>Harold E. Blinn</i>	- - 23
REST PERIOD RESPONSES AND COLD RESISTANCE IN THE RED RASPBERRY IN RELATION TO THE BREEDING OF HARDY VARIETIES: <i>Chester Druse Schwartz</i>	- - - 42
THE MAKING OF THE <i>Shapheordes</i> Calendar: <i>Roland B. Botting</i>	- - - 53

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RESEARCH STUDIES of the STATE COLLEGE OF WASHINGTON

VOLUME V

MARCH, 1937

NUMBER 1

STUDIES IN DROUGHT RESISTANCE OF THE SOY BEAN¹

HARRY F. CLEMENTS

Associate Professor of Botany

Though the original purpose of this work was to determine the normal course of nutritional metabolism of plants grown under field conditions during the years 1926 and 1927, the course of the problem was changed because of the occurrence of a severe drought in 1927. The second year, 1927, with its deficiency of moisture, provided conditions which were not conducive to unrestrained growth, especially in plants which were unable to resist drought. It was possible, therefore, to determine the influence of a drought on the metabolic activity of plants grown under field conditions and to compare it with that of plants grown under very favorable field conditions.

It has long been recognized that the capacity of a plant to resist drought is determined not by a mere manipulation of its stomatal apparatus but by some quality of the protoplasm.² To be sure, many plants in their evolutionary development have avoided this problem by completing their growth before the drought period sets in. Others have developed an extensive root system which makes it possible for them to obtain water from great depths. Others have a massive root system in relation to the tops. Still others have reduced their leaf area. But most of the mesophytic plants, plants which usually are found growing under conditions of moderate rainfall, show some degree of resistance if subjected to a drought. This seems to involve an actual change in the metabolic activity of the plant. At the beginning of a drought, the plant may respond by closing its stomata and thus reduce water loss. As conditions become more severe, wilting may take place, but if the drought persists, the plant may be killed unless it possesses some adaptive mechanisms, and these seem to be properties of the protoplasm of the individual plant, developed only when the plant is exposed to drought.

¹ Contribution No. 56 from the Botany Department of the State College of Washington.

² N. A. Maximov, *The Plant in Relation to Water* (London, 1929), pp 393-96.

The plants used in the study were the soy bean (*Soja max*), sunflower (*Helianthus annuus*), and potato (*Solanum tuberosum*). In the original plan, this selection was made so as to have plants which stored their reserve foods in various forms. The soy bean stores large quantities of protein and fat; the sunflower, oil; and the potato, carbohydrate. As shown by field growth, these three plants differed from one another in their capacity to resist drought. As the unfavorable conditions developed, all three plants responded by wilting. After some two weeks of wilting during the day and recovering at night, the soy bean apparently adjusted itself satisfactorily, for it no longer wilted, nor did it drop any leaves. Its growth rate, however, was reduced. The sunflower met the situation by wilting at first, and when the drought persisted, the leaves of this plant began to drop, the oldest leaves dropping first. This reduction of the transpiring surface continued until the end of the season, when only small terminal crowns of leaves remained. These leaves, however, did not wilt during the daytime. The potato was by far the least resistant of the plants studied. It, too, wilted at first, but it never recovered. It did recover during the night for the first month, but after that it seemed unable to further resist the conditions and soon died.

That there is something in the make-up of the protoplasm which makes possible the sustained resistance of the plants was indicated by the ease with which the plants were macerated in the grinding mill. The leaves of the soy bean, although they contained as much water as those of the other two plants, when ground by the plate grinder, appeared dry. It was necessary to regrind them twice before there was any suggestion of free water. The sunflower leaves, when ground once, showed as much moisture as the soy bean leaves did after their third grinding. The potato leaves, however, when put into the mill, released their water so readily that it actually squirted from the mill. It seemed that the ability of the plant to resist the loss of moisture to the atmosphere was at least correlated with the property of the leaf material which enabled it to retain its water against the mechanical pressure of the mill. Whatever this property might be, it appears that it is a characteristic of each individual cell, and since the wall of the cell was broken by the grinding, the protoplasm itself seems to be responsible for the sustained resistance of these plants.

In this paper an attempt is made to analyze the metabolic activity of the soy bean, a resistant plant. In a later paper, the activity of the other two plants will be given similar treatment.

METHODS

The Ito San variety of the soy bean was planted May 20, 1926, in rows in a sandy loam soil in Field No. 19 of the Experimental Plots at East Lansing, Michigan.^a The seeds germinated quickly and the plants grew rapidly. In 1927, the seeds were planted on May 22, but because of a cold and dry period, it was necessary to replant May 30. This planting was successful.

Collection of Samples

Beginning with the first week in July, weekly collections of plants were made. About one hundred plants were removed by digging. The collections were made about two hours after midnight to avoid as much as possible any daily interference with seasonal trends. The plants were rushed to the laboratory, where they were divided into their several parts: leaves, stems, roots, and later pods. The root sample represented only that part of the system which was obtained in the upper foot of soil. A record of the weight of each organ and the number of plants collected was made. These data provide information relative to the growth of the plants from week to week throughout the season. Two-hundred-gram samples of each organ were placed into an oven heated to 90° C, and kept there for thirty minutes, after which the temperature was lowered to 65° C. Heating was continued until the material showed no further loss of water. This usually required three days, after which the material was weighed, ground to sixty-mesh fineness, and stored for carbohydrate and fat analysis. Other two-hundred-gram samples of the various organs were used in the fresh state for nitrogen analysis.

Nitrogen Fractionation

The two-hundred-gram samples of fresh material of the various organs were ground in a plate grinder with generous quantities of water. The grinding was sufficiently intensive to reduce all the material to such fineness that the resulting mixture was semi-liquid in nature. This process required about ten minutes for each sample. The ground material was then brought to a boil, 10 cc. of 10% acetic acid was added to coagulate the colloidal nitrogen, and the material was filtered through a suction filter. The residue was discarded. The filtrate was made up to a volume of two liters, and served as the stock solution

^a The writer is indebted to the Botany Department of Michigan State College for the field space and laboratory facilities which made this study possible.

from which aliquots were taken for the determination of the various fractions.

Total Organic Nitrogen

Five-gram samples of the oven-dried material were subjected to Kjeldahl digestion and subsequent distillation.

Total Soluble Nitrogen

Fifty-cc. aliquots of the stock solution, to which were added twenty-five cc. of concentrated H_2SO_4 , were heated gently to distill off the water, after which a regular Kjeldahl analysis was made.

Phosphotungstic Acid Precipitate

To two-hundred-fifty-cc. aliquots of the stock solution made acid with H_2SO_4 to the extent of $2\frac{1}{2}\%$, ten cc. of 10% phosphotungstic acid in $2\frac{1}{2}\%$ H_2SO_4 were added. The precipitate was allowed to settle and was then filtered off and washed with dilute acid. The residue was subjected to Kjeldahl digestion and distillation.

Alpha-amino Nitrogen

Ten cc. aliquots of the stock solution were subjected to the Van Slyke method of analysis.⁴

Nitrate and Ammonium Nitrogen

To two-hundred-fifty-cc. aliquots of the stock solution were added five cc. of 40% NaOH solution and 0.5 grams of Devarda's metal. The ammonia and reduced nitrate were distilled as in Kjeldahl distillations.

Carbohydrate Fractions

Five-gram samples were used for the determination of the various carbohydrate fractions. Simple sugars, sucrose, starch, and hemicelluloses were determined according to methods previously described.⁵

Ether Extract

Two-gram samples of the dried material were subjected to a twenty-four-hour extraction by continuous percolation with diethyl ether which had been dehydrated by distillation over metallic sodium. The crude extract was dried and weighed and reported as such

⁴A. P. Mathews, *Physiological Chemistry*, 4th Ed. (New York, 1925), pp. 997-1004.

⁵Harry F. Clements, "Hourly Variations in Carbohydrate Content of Leaves and Petioles," *Bot Gas*, LXXXIX (1930), 241-72.

RESULTS AND DISCUSSION

Temperature and Rainfall Records

The daily temperatures (maximum, minimum, and mean) for the growing seasons 1926 and 1927 are reported graphically on Plate I together with the amount and distribution of rainfall.* The temperatures are reported in Fahrenheit degrees and rainfall in inches. The mean daily temperature is not weighted, but represents the average of the maximum and minimum. Although the temperature curves indicate good growing conditions, monthly averages of the daily temperatures show some rather marked differences between the two seasons.

TABLE I
Monthly Averages of Daily Temperatures for 1926 and 1927

Month	Average Maximum Temperatures		Average Minimum Temperatures		Average Mean Temperatures	
	1926	1927	1926	1927	1926	1927
May	70 06	65 35	43 22	45.22	56 12	55 29
June	73 87	74 00	49 57	50 67	62 03	62.40
July	83 48	81.38	58.42	57 38	70 97	69 36
August	80 61	78.23	60 61	49 97	70 90	63 45
September	70.70	76.83	50 10	54 10	60 40	65 47

Two of the months, June and July, show very comparable temperatures for the two seasons. May, 1926, was generally warmer during the day and cooler at night if compared with May, 1927. But since plantings were not made until late in May, these differences lose most of their significance. The maximum temperatures for August compare fairly well, but the minimum temperature for August, 1927, is 10.64° F. lower than for the same period the year before. Since the average is near 50° F. and since the temperatures during the day were favorable to soy bean growth, it is probable that the cooler night temperatures were actually helpful; for, as will be seen later, the drought period reached its greatest intensity during that month. September was appreciably warmer in 1927 than in 1926, but at no time was there danger of frost until the end of the growing season in 1926 after the plants had already matured normally. They had lost most of their leaves.

* The U S Weather Bureau at East Lansing, Michigan, kindly furnished these records.

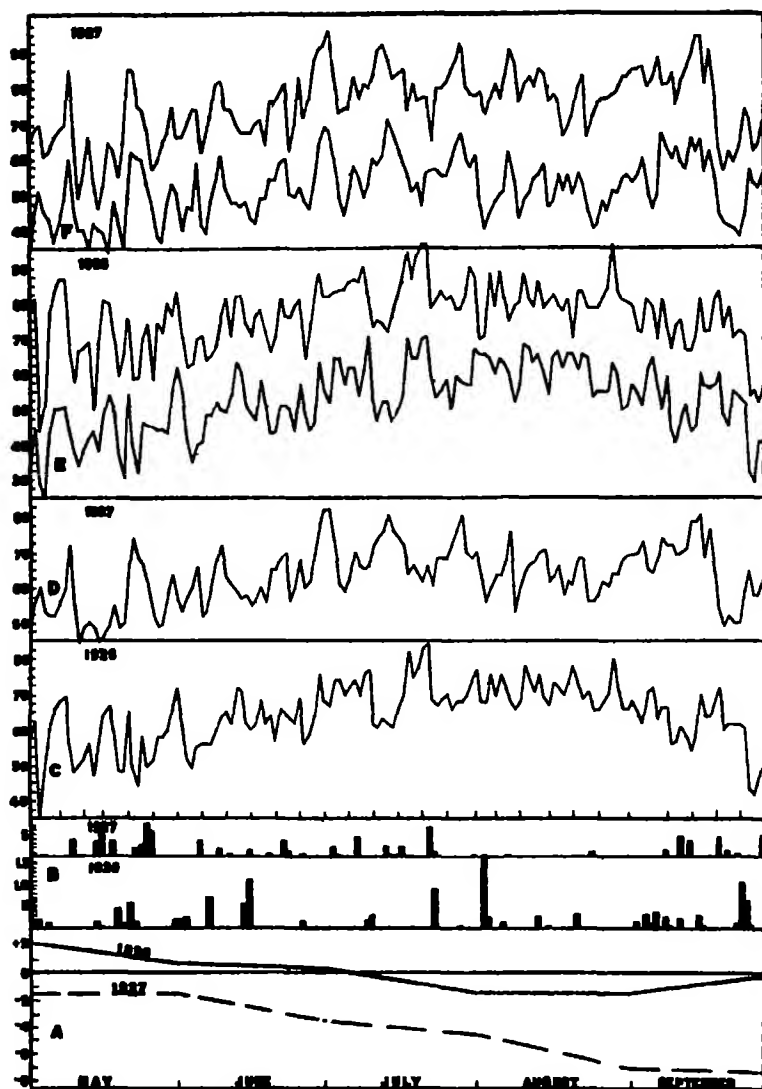


Plate I. Rainfall (inches) and temperature ($^{\circ}$ F) records for the period May-September for 1926 and 1927. Figure A: Accumulated deviation of rainfall from January 1. Fig. B: Actual amounts and distribution of rainfall. Fig. C: Mean daily temperatures—1926. Fig. D: Mean daily temperatures—1927. Fig. E: Daily maximum and minimum temperatures—1926. Fig. F: Daily maximum and minimum temperatures—1927.

An examination of Figures A and B of Plate I will show the 1927 season to have been considerably drier than 1926. On May 1, 1926, there was an accumulated excess since January 1 of 2.06 inches of moisture. This total was reduced until on August 1 it was 1.36 inches below normal. The rainfall during August was normal, and by the time the last collection was made in September enough rain had fallen so that the total rainfall since January 1 was nearly normal. In 1927, however, on May 1, there already was a deficiency of 1.65 inches since January 1. This deficiency continued to increase until by the end of August it was 7.06 inches below normal. September had normal rainfall. These data are assembled in Table II.

TABLE II
Accumulated Departure from Normal Rainfall since January 1
(Inches)

Time	1926	1927
May 1	2.06	-1.65
June 1	0.78	-1.62
July 1	0.37	-3.53
August 1	-1.36	-4.64
September 1	-1.36	-7.06
September 27	-0.29	Sept 19 -7.06

Thus, it is readily apparent that there was a considerable deficiency of moisture during the 1927 season. In fact, from July 22 until September 9, a period of seven weeks during the most critical stage of plant growth, the rainfall totaled only 0.41 inches. Most of this came in such small amounts that it is doubtful whether any of it benefited the plants. Further, during this dry period there was little or no dew formed.

The Growth of the Plants

The soy beans grew well during both seasons. The cold early season in 1927 was responsible for a replanting, but the plants grew well from then on. Each time a collection was made, the plants were divided into leaves, stems, roots, and later pods. The average weight of each organ per plant was obtained for each collection, and these data are graphed on Plate II. In general, in 1926, the leaves and stems showed a rapid increase in growth until after flowering. As pods began to fill, the growth rate decreased. This is particularly true of the leaves, for beginning September 1 those lowest on the stem began to drop. This

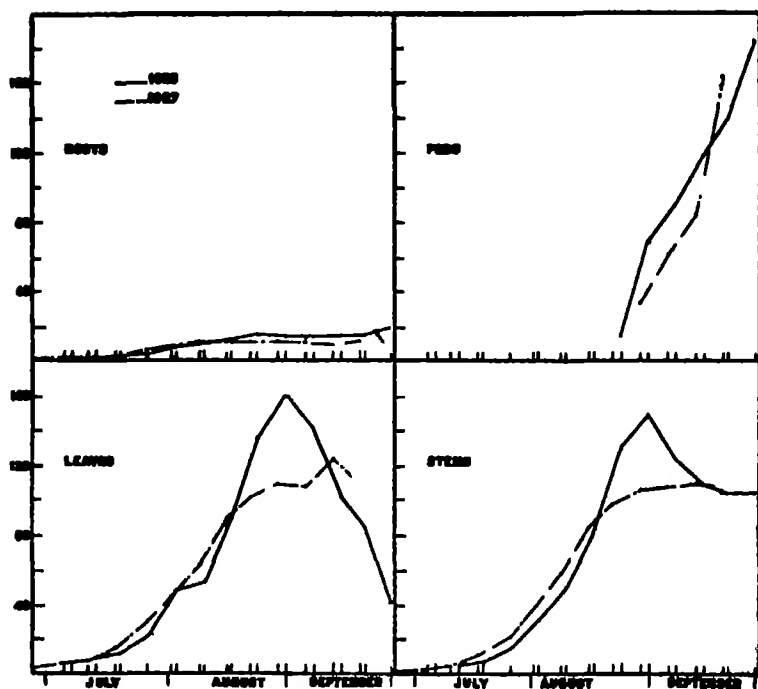


Plate II Growth curves for the various plant organs for 1926 and 1927 (Average weights in grams per plant)

leaf-drop continued until maturity, by which time the stems had become bare. The decreases in the weight of the stems can be accounted for in part by the lower moisture content (Plate III) and in part by the removal of material by the pods. The growth curves for the pods are not complete, since the early stages are not included, but they serve to show the remarkable movement of materials from the rest of the plant. The roots represented a comparatively small part of the plant. Growth of all parts in 1927 compares very favorably with that of 1926 until the middle of August, when the drought was already nearly one month old. Late in July and early in August, the plants wilted each day and recovered at night. Later, even though no rain fell, the plants no longer wilted even during the day—an indication that they had become adjusted to the unfavorable environment. The growth rate, however, fell, though there was no loss of leaves. The leaves showed a small increase in growth in September following the rains. Exactly

the same type of curve was obtained for the stems. The pods grew less rapidly in 1927 than in 1926, but reached nearly normal weight during the rainy period in September.

The plant as a whole responded to the drought period by some means which enabled it to retain all its parts, although growth activity was reduced during the unfavorable period. That it was successful in retaining the capacity for rapid synthesis and storage is demonstrated by the fact that as soon as rain fell (early September), there was an increase in the rate of top growth and an abrupt rise in the growth rate of the pods.

The Moisture Content

The moisture content of the various organs of the plant is reported on Plate III. In general, there is a more or less constant decrease in the moisture content as the various organs mature. The leaves during July, 1926, showed a response to the lack of moisture but otherwise maintained a uniformly decreasing moisture percentage. The stems showed a similar though less marked response during the same period. The roots, on the other hand, showed no such response. Apparently the soil moisture was sufficient to maintain normal quantities within the roots.

At the beginning of the collections in 1927, the leaves showed no response to the seasonal deficiency of rainfall, but during June and early July rainfall was nearer normal than at any other time. Toward the end of July, however, a small but consistent reduction of the moisture content was obtained. During the middle of August this reduction reached nearly 10% as compared with the leaves grown the previous season. This difference in the moisture content diminished as the season advanced and disappeared during September. The stems showed much the same reaction. The roots of the 1927 plants maintained a lower moisture content throughout the season except for two or three collections. The soy bean pods of the two seasons showed no significant differences beyond those already discussed.

It appears, then, that since there was considerably less moisture available in 1927 than in 1926, and, since the quantity of leaves was about the same during early August, the 1927 plants, even though they had a lower moisture content, had adopted some means of reducing water loss. Associated with this control, however, is the fact that growth activities had been reduced.

Carbohydrate Metabolism

The results of the carbohydrate analyses are shown graphically on Plate IV. Since sucrose is not a very important part of the soy bean metabolism, it is not reported separately but its amounts are combined with those of the simple sugars.

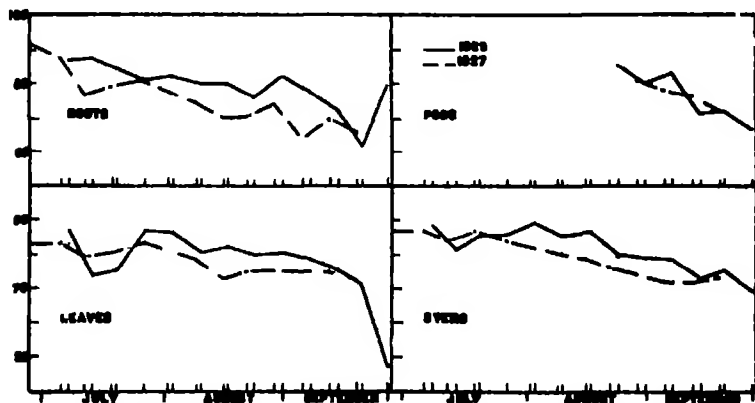


Plate III Moisture content of the various plant organs for 1926 and 1927 (Percentages of the green weight)

Leaves

As was previously reported,⁷ the soluble sugar level of the leaves seems to be more or less uniform. There appears no marked response to the drought. That the leaves have responded to the general deficiency of moisture, however, is indicated by the starch content, which is very much higher in 1927 than in 1926, and it becomes unusually high during the drought period. This indicates, that, though the photosynthetic process itself is not markedly affected, the lower moisture content associated with the adaptation to drought slows up the translocation apparatus. As will be shown later, this accumulation of starch is by no means a response to a deficiency of nitrogen.

The acid-hydrolyzable portion of the leaf carbohydrate is of particular interest. The leaves of the plants during the favorable season of 1926 maintain a level of nearly three per cent of the dry weight and accumulate more of this material toward the end of the season. In the unfavorable year, however, the acid-hydrolyzable portion begins to in-

⁷ Harry F. Clements "Hourly Variations in Carbohydrates Content of Leaves and Petioles," *Bot Gas*, LXXXIX (1930), 241-272.

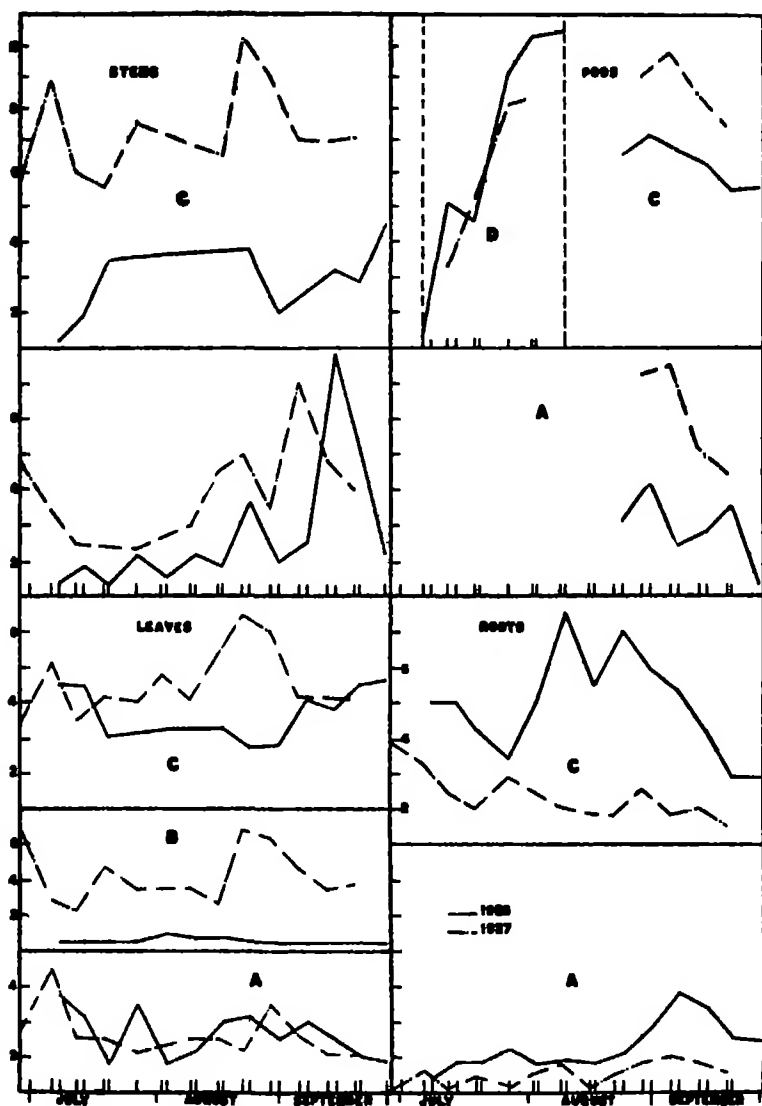


Plate IV. Carbohydrate content of the various plant organs for 1926 and 1927. (Percentages of dry materials.) Fig. A: Simple sugars and sucrose; Fig. B: Starch; Fig. C: Hemi-celluloses; Fig. D: Ether extract content of the pods for late August and September.

crease and reaches a high level, which drops rather sharply as soon as the September rains begin. It seems that this ability to develop and maintain large portions of this carbohydrate fraction is definitely associated with the ability of the plant to resist drought successfully.

Stems

The soluble sugar curves (Plate IV) for the stems show the same general pattern for the two years, although the one for 1927 is at a consistently higher level. As the drought became more intense, the sugar content increased, but it is possible that the high sugar content in September was less a response to drought than it was a picture of excessive temporary storage of materials. However, the earlier rise of the sugar content directly associated with the intense drought period suggests a relationship between the sugar content of these stems and drought. It may indicate a means of increasing the osmotic pressure of the plant sap or it may mean nothing more than an accumulation of materials which might under more favorable conditions have taken part in the growth of roots and tops.

The starch content of the roots, stems, and pods was so low and apparently insignificant that it is not considered in this work. A very marked difference, however, appears between the acid-hydrolyzable portions of the two seasons. The content was low during 1926 but very high during 1927—with a marked increase beginning at the time growth was slowed down by the drought, and with a decrease again as rains fell and growth activity was resumed. There appears to be a very strong association between some materials included in this group and the capacity of the plant to resist drought.

Roots

The relations of the carbohydrates of the roots of the two seasons were the reverse of those found to exist in the stems and the leaves. The soluble-sugar curve was lower for 1927, as was also the acid-hydrolyzable portion. It seems that during the rather ideal conditions which obtained in 1926 an excess of materials was moved to the roots and stored in a permanent form. It might also be suggested that, because the 1927 stems were much higher in soluble sugars than the 1926 stems, the reason the 1927 roots were lower in food materials was the effect which the drought had on slowing up the translocation of materials into them.

Pods

The soluble carbohydrate content was considerably higher in the pods of the drought-resisting plants than in the others. This was also true of the acid-hydrolyzable portion. As the fat and oil content of the seeds increased, there was a decrease of the carbohydrates. This conversion is a rapid one, for in a period of five weeks the fat content of the pods (both seeds and sporophylls) increased from less than 1% to about 11%. Though this process is essentially one of dehydration, during the dry year less fat was formed than in the previous year. This may mean that the drought had interfered with the enzymes involved in the fat conversion or that the carbohydrates were not moved to the proper places for synthesis. It should be pointed out that the higher carbohydrate content of the pods during 1927 might have been limited to the sporophyll and that the systemic sluggishness of the translocatory mechanism extended to the ovule as well.

Nitrogen Metabolism

The amounts of the various nitrogen fractions are shown in Plate V.

Leaves

The total nitrogen content of the leaves in 1926 increases up until flowering and then steadily decreases. This appears to be true also the next year. It is surprising to find the nitrogen level during the dry year to be higher than under the more favorable conditions of 1926. If the total nitrogen contents of the leaves of the two years are compared on a green weight basis, the disparity is even greater, since the moisture content is lower in 1927, and the carbohydrate content much higher. The same relationship holds for the total soluble nitrogen fraction. The phosphotungstic-acid precipitate shows little or no difference for the two years, but the alpha-amino nitrogen content is much higher during the dry year. The content at the beginning of 1927 was approximately at the same level as the previous year, but it increased in amount until, towards the end of the growing season, it was more than five times as high as that of the previous season. Although the nitrate and the ammonium nitrogen content fluctuated more in 1927 than in 1926, it does reach high levels. Certainly, if one were presented with this picture without knowledge of the actual growth rates of the plants, he would say without hesitation that the 1927 curves represented the composition of plants with a much higher growth activity than the 1926 plants, and yet the reverse was true. It appears, therefore, that, though

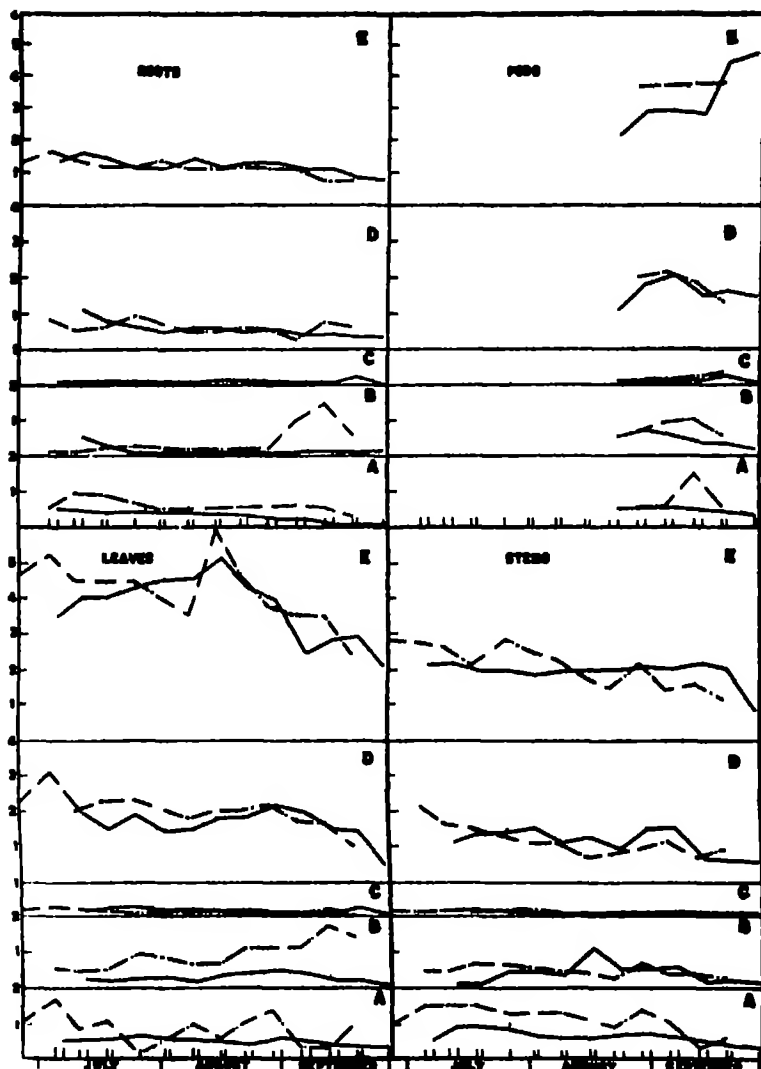


Plate V. The nitrogen content of the various plant organs for 1926 and 1927 (Percentages of the dried material.) Fig A: Nitrate and ammonium Fig. B: Alpha-amino nitrogen. Fig. C: phosphotungstic acid precipitate. Fig. D: Total soluble nitrogen. Fig. E: Total organic nitrogen.

the relationship existing between the carbohydrates and nitrogen compounds is an adequate index of the growth capacity of a plant, a proper balance might exist and yet the plants are really not responding. This seems to be caused largely by the inactivity of the protoplasm, which in turn is induced by a moisture deficiency or by the balance between the absorption and transpiration of moisture.

Stems

What has been said for the leaves, applies in general to the stems, although the total nitrogen content dropped to a lower level when the drought became severe. This, however, is more apparent than real, inasmuch as Plate IV shows an enormously greater carbohydrate content at the same time. This also applies to the total soluble nitrogen, and the amino acid content. That nitrates and ammonium salts were not responsible for the reduced growth in 1927 is indicated by the comparatively large amounts of these materials in the stem.

Roots

In general, the nitrogen metabolism of the roots is similar to that of the stems, although at a lower level. Nitrates were plentiful in 1927. The amino acids were maintained at a higher level until the rains began toward the end of the growing season, when a marked rise occurs. Otherwise, the roots of the two seasons do not show great differences.

Pods

No very marked effects of the drought appear on the nitrogen metabolism of the pods. Although the soluble forms of nitrogen in general maintain higher levels in 1927, the final total nitrogen content is higher in the fruits of the 1926 plants.

CONCLUSIONS

That the soy bean is capable of resisting drought is indicated by the fact that it adjusted itself to a deficiency of moisture which, during the early stages, was severe enough to cause the daily wilting of the leaves. The plant by some means was able to withstand the effects of the drought even though its intensity increased. Outwardly, the most noticeable change was the reduction of the growth rate. Inwardly, however, many changes occurred. The plant produced large quantities of hemi-celluloses in its stems and leaves. These materials by microscopic examination were found not only to line the inner walls of the cells but also to extend into the protoplasm. Since this group of carbohydrates contains gel-forming materials, it is not unreasonable to suppose that the cell contents have a greater viscosity than those of cells

produced under more optimum conditions. This highly colloidal system absorbed gentian violet readily. In fact, it was difficult to destain sufficiently to see the contents clearly. It is possible that the reason the plants overcame their wilting period was that as they built up this hemi-cellulose content, the viscosity of the protoplasm was great enough to approach a gel condition providing enough rigidity to support the cell walls, and thus prevent their collapse. If Iljin^a is correct in stating that dessication kills cells by rupturing the protoplasts as the vacuoles disappear, then a highly viscous protoplasm would be a benefit to drought-resisting plants. On the other hand, the gel itself, continuous from the protoplast to the outside of the cell wall, could well be a means of retarding water loss. The resistance to water movement would be greater in a gel. Further, if the desiccation in the outer portion of the cell wall proceeds more rapidly than the outward movement of water from within the cell, such desiccated portions would be wetted subsequently with difficulty, and thus further retard water loss. The development of this more highly viscous system is reflected by a greater protoplasmic stability and therefore reduced metabolic activity and growth.

SUMMARY

1. The soy bean plant was studied with respect to its capacity to resist drought under field conditions. The growth rates of the plants observed under conditions of normal rainfall and of greatly reduced rainfall, respectively, together with a correlation of their chemical composition under the two conditions of growth served as the basis for the study.
2. Growth is reduced under drought conditions, although in other respects the plants are similar in their outward appearances.
3. The hemi-cellulose content of the drought-resisting plants is much higher than of plants grown under more optimum conditions. The soluble sugars do not appear to show any response to the drought. Starch is more abundant under the unfavorable conditions for growth, an indication that, although the drought does not seem to slow up photosynthesis, it does the translocation of materials.
4. The nitrogen metabolism is maintained at a higher level during the drought period than during normal conditions, even though the growth rate is reduced.
5. A mechanism of drought resistance is suggested.

^aV. S. Iljin, "Ueber die Austrocknungsfähigkeit des lebenden Protoplasmas der vegetativen Pflanzenzellen" *Jahrb für Wiss Bot*, LXVI (1927), 947-964.

LANGUAGE OF INSTITUTIONAL DELINQUENTS

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Hargan¹ in a recent study of the criminal vocabulary reports certain unique distortions in the vernacular that is found among the inmates at Sing Sing prison. He maintains that the criminal's social rebellion is manifest through a particular language medium which yields the offender another vehicle for scorning conventional standards. This behavior not only offers a degree of personal satisfaction, but also fosters the development of a special class consciousness that consolidates undesirable social attitudes.

For several months the present writer was in a position to observe diverse activities of delinquent boys in a New York state reform school.² He was able to collect representative samples of delinquent jargon as well as to obtain a rather typical institutional description written in the language of one of the inmates. The average chronological age of the boys was approximately eighteen years, their mean intelligence quotient was about 90, and over 80% of them had been retarded two or more terms in their previous school work.

The following unexpurgated description freely utilizes the institutional language of these boys and presents intimate views of activities taking place "within the walls." One of the self-imposed responsibilities of the young delinquent is to acquire a pattern of conduct that typifies the accepted behavior of his group. The flexibility in speech adoption consequently results in an early usage of that particular terminology which carries the expression of group approval.

This article endeavors, therefore, to present certain evidence regarding the early stages of the criminal's vocabulary. It indicates that verbal differentiation is well on its way. Though the vocabulary of adolescent delinquents agrees only in some instances with the Sing Sing terminology, verbal specialization has already set in. The following description written by one of the inmates in the House of Refuge is now reported in order to characterize the slang in its natural setting:

A good looking boy entering the institution is looked over by big timers. Coming down the yard, he's offered to mope around with one or more big

¹ James Hargan, "The Psychology of Prison Language," *Journal of Abnormal and Social Psychology*, XXX (October, 1935), 359-365

² The House of Refuge was located at Randall's Island in New York City. This institution was transferred to West Coxsackie, New York, in 1935.

timers who often causes an argument which may lead to a fight. The big timer with the most backing up would win out. Many times it is done without any trouble. This good looking boy is specified as the big timers *Kid*. Some big timers, descent [decent] ones take a kid on their bench just to take care of the boy. Some take a kid with them to use him as a pet, as for hugging the kid and sometimes kissing the kid.

Some skunks try to make punks of the good looking boys which are often successful. Either giving the boy a cigarette or more common to threaten to bulldoze the boy. A punk is rarely specified as anyones kid. He is specified as a punk or good-stuff.

Part of the trouble in the yard is caused by kids which results to a mob fight always. A mob fight is a fight between two benches which results to many fellows getting cut with blades or some sharp poisoned metal, heads split open with clubs, bricks or iron rods.

Trouble is also caused by fellows picking foolish arguments with other fellows or by one fellow with a bench behind him to take the part of a friend in some argument with some other bench. About $\frac{3}{4}$ of the trouble in the yard is caused mainly for tobacco.

Sometimes you may get a descent fellow who when seeing an argument would try to stop it in order to prevent trouble

Many a time a bench being into trouble with another bench and knowing the impossibilities to beat the opposing bench would ask the help of some other bench. This third bench having no hard feelings against either bench not wanting to take neither part, the most this third bench would do is to try to avoid the fight.

There are very few fellows who would think of stopping a fight or have the influence to do so.

When trouble looms the yard becomes almost silent, large groups walking around. Other benches keep together waiting for some one to start. As soon as one fellow picks up the gutts to start, why most of them get in and start a free for all. Some poor fellows drop away which will probably be called yellow. Many poor dopes with parents and a home get into it just for the sake of being called a big timer. Win or lose in a mob fight you will loose always. Some descent fellows are dragged into it by some wise guy. Those fellows really feel it, but just for the sake of not being called yellow would go in and probably take it both ways.

It doesn't require much guts to start a mob fight knowing there's a whole bench behind you. There's not five fellows who are supposed to be big timers in the yard who have the gutts to fight a fellow fair. There's where you need the gutts. Many of the so called dopes in the yard can take many of the big timers alone and show them up. They haven't got the chance.

A dope when taking a big timer for a fair fight will never win, if he beats the big timer why the loser's bench would beat the dope up. Many a time a dope is beat up only for offering a big timer a fair fight. You can plainly see that those benches are made up largely of yellow skunks. You will find

maybe one or two good benches who mind their own business and when ever any trouble comes up why they either try to settle it or try to get a fair fight so as not to get any one else into trouble.

Boys also get into trouble with officers There are officers who really pick on boys Some reasons which cause officers to pick on boys is because the boys may make errors while working or some officers being afraid of certain boys, other officers would try to show them up by showing them that they are not afraid of the boys, a boy changing his job or asking to have his job changed would cause an officer to pick on him

A boy entering this institution learns more bad habits than he would ever think of learning out side. It is as though a fellow were sent here to take a course in robbery Some boys think its an honor to talk about big criminals and robberies, to say that they [?] such and such a gangster and that they pulled jobs with such and such gangsters

They call these institutions reformatories. If the officers aren't good how can they possibly help the boys There is more hard feeling between officers than what there is between the boy of the yard It just simply proves that some of the officers employed here are not the type to hold a position of this sort. Most of the officers are foreigners There are different nationalities and the different nationalities are against one another

There are a few descent officers who really feel the responsibilities of their job.

Sometimes the boys themselves cause officers to turn out bad. An officer trying to be good to the boys may get the majority of the boys to cooperate with him and yet there will be a wise guy among the crowd who will spoil it for the rest of the boys.

Some officers depend entirely upon the boys whether the officer will turn out good or bad. Some are just made to be mean which of course will never be liked by the boys The boys cause many an officer to lose his job. An officer doing a favor for some boy which may be against the rules of the house may be found out when he gave a report to a rat The rat in order to gain revenge would go and spill the beans

At least nine out of every ----- officers in or coming into the institution are asked by some fellow to bring in tobacco^a

The fellows may catch one officer out of the nine to bring in tobacco Any officer bringing in tobacco if not found out within a few months learns enough by that time to stop bringing in tobacco He is either tipped off by some other officer or seeing he is making headway at his work would teach him to stop.

Some officers bring in tobacco for nothing, some may take money and give you just what was paid for, and some officers make money on the deal.

This helps the boys in the yard make money also What a fellow gets for one sheet from an officer he can sell to the boys in the yard for five and

^a The use of tobacco had until quite recently been forbidden to the boys.

ten sheets The boys manage to get money on the Island in many ways When theres plenty of tobbaeco on the island the fellows can buy from one another one, two, three and sometimes more packs of tobbaeco for a sheet When tobacco is low why some boys are willing to take even five cigarettes for a dollar Fellows often give meals away for cigarettes. Almost every officer who is now at a fairly big standing in this institution now brought tobbaeco in for the boys at the time they first received the job.

Getting tobbaeco from an officer is stated as having the officer roped

This description rather typically portrays a fairly accurate picture of certain conditions experienced by the boys in this particular institution. It represents an atmosphere that surrounded them at a rather crucial period in their lives. Such influences undoubtedly spread from the existing thoughts toward their subsequent attitudes with respect to society. Moreover, the cultivation of this particular jargon serves to emphasize a feeling of group solidarity Novitiates are particularly attracted and impressed by the verbal distinctions.

The subsequent list of institutional expressions was gathered by the writer in the course of his contacts with delinquent boys.* Although the list contains certain slang items already recognized, it shows a particular emergence of language distortion from the more conventional versions.

Aces anything perfect
Beef. to talk
Bellows wide trouser bottoms
Bench gang
*Bench*o: member of gang
Bid sentence received
Big poly the bugler (granted considerable freedom)
Big timer fighting leader
Bigo: leader of group
Biscuit smile
Blade knife
Bowlo fight with cups (in dining room)
Breeze to escape
Bug test. psychological test
Bums. officers (guards)
Bunch out to scatter
Bunk to hide

Cardo striking surface of match box or booklet
Cal's eyes tapioca pudding
Cheeso to squeal
Cokie: nurse
Dead house. hospital
Dogs shoes, frankfurters, or feet
Dope boy who does the right thing or minds his own business
Dormo dormitory
Doublo full package of cigarettes
Feeblo boy considered mentally deficient
Fweo five
Frencho fresh bed
Grease butter
Gumeo boy who goes in for sports but plays poorly
Harmo harmonica

* See Paul Fendrick and Guy Bond, "Delinquency and Reading," *Journal of Genetic Psychology*, XLVIII (March, 1935), 236-243

<i>Have-a-nut</i> fellow acting independent	<i>Plant a bush</i> to be in someone's good graces
<i>Holyo.</i> religious boy	<i>Politician</i> : one who has an easy job
<i>Horse</i> : heavy boy	<i>Pop</i> inmate taking care of another boy
<i>Jack</i> : to hit someone over the head	<i>Punk</i> : an immoral boy
<i>Jump</i> to pummel a boy, to gang up	<i>Rat</i> one who "squeals"
<i>Kick up</i> : refusal to obey	<i>Ranked</i> caught
<i>Kid</i> protégé	<i>Ricos</i> cornflakes
<i>Kinch</i> the superintendent	<i>Ripped</i> to be cut
<i>Knock off</i> : to desist	<i>Scalping</i> a poor haircut
<i>Lead pipes</i> : spaghetti	<i>Scoff</i> a big eater
<i>Leco</i> boy assigned to the electric shop	<i>Sechs (sex)</i> : warning to desist (on appearance of officer)
<i>Let it rip</i> to start something	<i>Sheet</i> dollar bill
<i>Lipo</i> : small cigarette butt	<i>Slew</i> : to take unobserved
<i>Little poly</i> leader of a small gang	<i>Sleunt</i> to hide something
<i>Lob</i> boy who works hard	<i>Slop house</i> : boys' kitchen
<i>Looch</i> a light	<i>Slyo</i> to do something stealthily
<i>Louie</i> lieutenant guard	<i>Spare it</i> to desist
<i>Mary's room</i> punishment chamber	<i>Steamed up</i> angry
<i>Moba</i> : gang fight	<i>Teno</i> ten
<i>Mope around</i> to walk around	<i>Tino</i> boy assigned to tinsmith shop
<i>Mud</i> cocoa	<i>Tough smovey</i> too bad
<i>Mush</i> cereal	<i>Tripe</i> : woman
<i>New jack</i> new inmate	<i>Truck</i> boy accustomed to carry tobacco, etc., about his person
<i>Newso</i> newspaper	<i>Twerp</i> same as "dope"
<i>One way ticket to Mary's room</i> card indicating punishment by confinement	<i>Typeurster</i> machine gun
<i>Pet</i> : a recipient of affection	<i>Weed</i> cigarette
<i>Pike off</i> to see something	<i>Wise up</i> to become aware

This unique vernacular, created and fostered in the emotionalized atmosphere of social segregation, tends to undo much of the paternal influence assumed by society in endeavoring to remold the boy's personality. Whether or not counter measures could be instituted to redirect these expansive verbalisms is an open question.

THE EFFECTS OF CONTINUED APPLICATION OF IRRIGATION WATER AND COMMERCIAL FERTILIZERS TO EPHRATA FINE SAND IN THE WENATCHEE ORCHARD DISTRICT¹

CARL A. LARSON

Seven fertilized plots of twenty-year-old Jonathan apple trees on regularly irrigated fine sandy soil in east Wenatchee were treated with applications of N, P, K, singly and in combination. The rate of application per tree and the compound used were as follows: N, five pounds $(\text{NH}_4)_2\text{SO}_4$; P, five pounds superphosphate; K, five pounds KCl. The first application of fertilizer was made in 1927. In 1930 the soil was analyzed for the fertilizing element by the following methods: base exchange capacity by neutral salt and electro dialysis; extracts with 0.2N HNO_3 ; and extracts with water. The results of these analyses showed no direct correlation with the fertilizer treatment or with the production of fruit. Nitrate Nitrogen determinations made on the fifteenth of April and the fifteenth of May show a high $\text{NO}_3\text{-N}$ content where N had been applied. The $\text{NO}_3\text{-N}$ content was negligible in all plots on July 1. Soil taken from fertilized plots, incubated in buckets, and enriched with four monthly applications of fertilizer at the same rate as field applications showed a decrease in pH of plots treated with nitrogen singly or in combination with other fertilizers. Extracts of incubated soil with 0.2N HNO_3 showed high P on P-treated plots with the exception of P alone.

Foliar diagnosis was made on Jonathan apple leaves collected at monthly intervals, May to September, from bearing and non-bearing spurs of each fertilized plot. When the percentages of N, P, K, and Ca in the leaves were shown graphically, a definite ratio of plant food elements was found responsible for increased yield and tree vigor. The ratio of N, P, K in the leaves from bearing spurs of a vigorous tree that gave a good yield was as follows. N, 1.90; P, 0.22; and K, 1.12%. Deviation from this ratio was associated with markedly reduced yields as shown in plots receiving P and K alone. Application of K alone increased the P content of the leaves and reduced the Ca content. The highest yields of fruit were obtained from plots treated with nitrogen whether singly or in combination with P and K.

¹ Abstract of a dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Agriculture (Agronomy), State College of Washington (1931). The major portion was published as "Effects of Fertilizers on Irrigated Ephrata Fine Sand and Apple Tree Response in the Wenatchee Orchard District," *Journal of American Society of Agronomy*, XXV, No. 10 (October, 1933).

HENRY VIII AND THE IMPERIAL ELECTION OF 1519

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The interest of Henry VIII and his great minister Wolsey in seeking to maintain a balance of power in the politics of Europe has long been recognized. Likewise, the importance of the imperial election of 1519 in the struggle between the houses of Hapsburg and Valois and its relation to the balance of power have long been understood. But, strangely, neither the interest of Henry in this all-important election, nor his venture on the stage of continental politics as a belated candidate for the imperial throne have ever been fully explained. In a brief editorial note, Henry Ellis long ago expressed his conviction that Henry had both the interest and the power to prevent the election of either Charles of Spain or Francis of France but failed to make timely or proper use of the power he possessed. Ellis pointed out that Henry early promised his support to both continental candidates; subsequently he sent Richard Pace to announce his own pretensions, but "finding the Electors pre-engaged and perhaps unwilling to vie with the competitors in the distribution of treasure, he [Henry] soothed his ambitions with the reflection that he had solicited too late, and became altogether the dupe of his own duplicity"¹ Although this comment is more accurate than that of many later writers, it fails to take into account the question of the seriousness of Henry's aspirations or to consider the handicap of his nationality and his lack of a military force.

The question of Henry's candidacy is inseparable from the general problem of the whole pre-election contest. To understand the part played by the King of England, it is thus necessary to trace the story of the entire electoral campaign, with the purpose of showing to what extent the negotiation had proceeded before Henry became a candidate and of comparing his methods with those of his competitors; but for this purpose it does not seem necessary to record at great length the details of the various proposals and the agreements which resulted. These may be consulted in the narrative accounts of the election.²

¹ Henry Ellis, *Original Letters Illustrative of English History* (1st series, 3 vols., London, 1824), I, 135-37.

² Paul Kalkoff, *Die Kaiserwahl Friederichs IV und Karls V* (Weimar, 1925); M. Mignet, "Une election a l'empire en 1519," *Revue des deux Mondes* (Series 2, Vol. VII, January 15, 1854), incorporated as a chapter in *Royaume de François Ier et de Charles-Quint* (2 vols., Paris, 1875), by the same author; E. Robert Roessler, *Die Kaiserwahl Karls V* (Vienna, 1868); Bernhard Weicher, *Die Stellung der Kurfürsten zur Wahl Karls V im Jahre 1519* (Berlin, 1901)

Francis I of France early grasped the significance and possibilities of the situation which would result upon the death of Maximilian and set about to win the imperial crown for himself. Knowing the recent Treaties of Noyon and Cambrai were little more than armed truces in the Hapsburg-Valois wars, he might well fear the ultimate result of that struggle if King Charles, the grandson of Maximilian, should add the Empire to his already powerful Spanish dominions. Francis' first efforts, because of personal ill-feeling on the part of several of the electors toward Maximilian, met with encouraging success. On November 18, 1516, Henri Dungen de Vutlick, Ambassador to the Archbishop of Treves, promised the latter's vote; on June 26, 1517, a treaty was concluded whereby Joachim of Brandenburg pledged his vote in return for a promise of the hand of Renée, daughter of Louis XII, with a liberal dowry and pension. On behalf of the Archbishop of Mainz, Ulrich von Hutten promised a third vote to Francis, and the Count Palatine wrote a letter (which he subsequently often begged should be burned) promising to work for the success of the Most Christian King.³ Francis, in return for various pensions, also secured the alliance of a good number of German princes and attached to his service Francis Sickingen, an able free-lance military leader with a considerable force.⁴

Francis' encouraging beginnings were, however, soon counteracted by the efforts of Maximilian; by the promise of considerable pensions, the latter secured pledges from the Electors of Cologne, Mainz, and Bohemia that their votes should be cast for Charles, and Joachim of Brandenburg was won over by a promise of the hand of the Infanta Catherine, in addition to a large pension.⁵ The electors were already making it evident that their personal prejudices could be overcome by sufficient monetary compensation and that financial grants would play an important part in their attitude. Maximilian, whose lack of resources was well known,⁶ of course, could not furnish these pensions from his own treasury. He relied upon Charles to provide the necessary funds, and before Maximilian's death, Charles had sent some 200,000 ducats to Germany for use in winning electoral votes, besides

³ Mignet, *op. cit.*, pp. 214-16, Ranke, *op. cit.*, pp. 174-5

⁴ Mignet, *op. cit.*, pp. 217-18; Ranke, *op. cit.*, p. 180

⁵ Mignet, *op. cit.*, p. 224; Brewer, *op. cit.*, I, 298.

⁶ As late as January, 1519, the month of his death, Maximilian had secured a loan of 25,000 ducats from England. Cf. Sebastian Guistinian, *Despatches to the Signory of Venice* (2 vols., London, 1854), II, 251.

promising much more when he should have been elected.⁷ Maximilian also seized upon the occasion of a quarrel between the French king and Sickingen to secure the services of the latter in the interests of Charles' election (May, 1518).⁸ When, in August, 1518, a diet of the electors met at Augsburg, Maximilian availed himself of the opportunity to secure renewed assurances from the Electors of Brandenburg, Cologne, Mainz, and Bohemia, and also succeeded in winning over the representatives of the Count Palatine (the count himself was not present at the diet). The Electors of Treves and Saxony, however, refused to commit themselves to Charles, on the ground that, by the terms of the Golden Bull, they must be free to vote as they pleased at the election.⁹ On September 1, formal documents concerning these various pledges were exchanged between Maximilian and the five electors; Maximilian had promised a total of 514,075 florins for the five votes and an additional 70,000 florins to various lesser princes.¹⁰

The Emperor, fully aware of the unreliability of the electors' promises, wished to see the election of Charles as King of the Romans before his own (Maximilian's) death.¹¹ What proved to be an insuperable legal difficulty, however, prevented this scheme from being carried out. Having himself never been crowned Emperor, Maximilian technically still held the office of King of the Romans, and a second person, of course, could not be elected to the same position. To overcome this difficulty, Maximilian requested Pope Leo X to send the imperial crown to Germany and to permit the coronation ceremony to be performed at Trent by the Cardinal de Medici and the Archbishop-Cardinal of Mainz. Leo refused this request on the ground of the irregu-

⁷ Andre J. Le Glay, *Négociations diplomatiques entre la France et l'Autriche* (2 vols., Paris, 1845), II, 125; *Letters and Papers Foreign and Domestic, of the Reign of Henry VIII* (21 vols., London, 1867), III, Pt. 1, pp. 9-10 (hereafter cited as *Letters and Papers*).

⁸ Le Glay, *op. cit.*, II, 129; Brewer, *op. cit.*, I, 303-04.

⁹ Mignet, *op. cit.*, pp. 221-26; *Calendar of State Papers and Manuscripts - Venice, 1509-19* (London, 1867), pp. 460, 469.

¹⁰ Le Glay, *op. cit.*, II, 170-73; Franz B. Bucholtz, *Geschichte der Regierung Ferdinand des Ersten* (9 vols., Vienna, 1831-38), III, 665-70.

¹¹ Indeed the Electors of Treves and Brandenburg had already informed Francis of the developments at Augsburg while the diet was still in session, and Francis had at once dispatched Marigny to uphold his cause. By the time Marigny arrived, however, the diet had been adjourned, and Francis was forced to begin his campaign all over again.

larity of the proposal,¹² but his decision was no doubt due at least in part to his opposition to the election of Charles, who had already been invested with the Kingdom of Naples, and his belief that Maximilian, impecunious as he was, could not afford a trip to Italy to be crowned (December, 1518).¹³

Accordingly, no definite settlement as to the succession had been reached at the time of Maximilian's unexpected death at Wels, in Upper Austria, on January 12, 1519, and the contest was at once reopened with renewed vigor.¹⁴

It is evident from this account that, during these preliminary negotiations, Henry VIII of England was not being seriously considered as a possible successor to Maximilian. It is true, however, that such a possibility had been suggested to him. In May, 1516, Richard Pace, Henry's secretary, reported to his master that Maximilian had suggested investing the King of England with the Empire. Pace expressed the opinion that the electors would not allow the imperial dignity to fall upon a non-German and considered the suggestion as merely a move on the part of Maximilian to secure money from Henry. To discourage Henry as completely as possible, Pace even declared, "Whilst we looked for the crown imperial, we might lose the crown of England, which is this day more esteemed than the emperor's crown and all his empire."¹⁵ Again, in February, 1517, Dr. Cuthbert Tunstall wrote that Maximilian intended resigning the empire to Henry and to secure the latter's election by soliciting the electors; Maximilian wished secret negotiations to be opened on this project. Like Pace, Tunstall believed Maximilian was using this offer simply as a means of securing money and stated his conviction that Henry's nationality was a bar to his election.¹⁶ Henry seems to have been convinced by these arguments and made no effort to take advantage of Maximilian's proposals; but he had at least received a suggestion which was doubtless very attractive to him, and which he might be willing to pursue actively if a really favorable opportunity should present itself.

¹² The only occasions on which the crown had ever been sent from the papal court for an imperial coronation were on the accessions of Henry VI and Charles IV, during the papal residence at Avignon, and even in those instances, the coronations had taken place at Rome.

¹³ *Calendar of State Papers Venice, 1509-19*, pp. 476, 479-80, 487-8, Le Clay, *op cit.*, II, 175.

¹⁴ Mignet, *op. cit.*, p. 229.

¹⁵ *Letters and Papers*, II, 539-40, 557.

¹⁶ Ellis, *op. cit.*, I, 135-37.

On hearing of the death of Maximilian, Francis and Charles at once redoubled their efforts to secure votes. Francis, being closer to Germany, gained the first advantages from the new situation. To win definitely the support of the pope, Francis promised to undertake a crusade against the Turks within three years after his election.¹⁷ Leo X in return promised to support Francis in his attempt to win the imperial crown—a promise which he consistently fulfilled until April, 1519, when he learned, through his agents in Germany, that the majority of the electors were more favorable to Charles.¹⁸

In order to promote his cause with the electors, Francis dispatched into Germany (at the end of January)¹⁹ a special deputation, of which D'Orval, Bonnavet, Fleuranges, and Guillart were the leading members, authorizing it to offer money and favors to win at any price.²⁰

Guillart, who was president of the Parlement of Paris, indeed suggested to Francis that it would be to his glory and honor to abstain from force or bribery and to rely only on his merits to win the election. Francis' reply indicates the Machiavellian nature of the contest (a fact which, as we shall see, Henry VIII does not seem to have grasped):

If I had to deal only with the virtuous or with those who even pretended to a shadow of virtue, your advice would be expedient and honest; but in times like the present, whatever a man sets his heart upon, be it the papacy, be it the empire, or anything else, he has no means of obtaining his object except by force or corruption. The men with whom I have to deal don't mince mouths in this matter. Long since, had Maximilian been alive, the money for the bargain would have been ready for delivery at all the banks of Germany.²¹

There can be no question that this statement summed up the true nature of the contest.

Francis' agents (d'Orval and Fleuranges) first interviewed the Archbishop of Treves, who had never promised his vote to Charles,

¹⁷ Jean Barrillon, *Journal* (2 vols., Paris, 1899), II, 116, Ernest Charrière, *Négociations de la France et le Levant* (4 vols., Paris, 1860), I, 78-82.

¹⁸ Barrillon, *op. cit.*, II, 145n2; Mignet, *op. cit.*, pp. 237-38; *Calendar of State Papers: Venice, 1509-19*, pp. 494, 497, 511, 513, 517, 523, 527-28, *Letters and Papers*, III, Pt. I, pp. 60, 103, 115.

¹⁹ Some writers (du Bellay and Barrillon) give the date of the instructions as April, 1519; I think there can be no doubt that the instructions of that date were sent to confirm and elaborate upon an earlier set. It hardly seems possible that Francis would have dispatched such a mission without providing it with instructions.

²⁰ Martin and Guillaume du Bellay, *Memoires* (2 vols., Paris, 1908), I, 94; Mignet, *op. cit.*, p. 233; Barrillon, *op. cit.*, II, 121.

²¹ Mignet, *op. cit.*, p. 232, Brewer, *op. cit.*, I, 305.

and who now gave renewed assurances of his intention to vote for the King of France.³³ Bonnivet and Jean Tavannes went on to Frankfort, where they interviewed the Duke of Saxony; the Duke had never promised his vote and declined to pledge himself.³⁴ At Bonn, the Archbishop of Cologne provided d'Orval and Fleuranges with "a marvelously good reception" and a dinner lasting four hours, but although he indicated that he was favorable to Francis, he declined to engage himself definitely.³⁵ At Berlin more success was enjoyed, for on April 8, Joachim renewed his obligations of the treaty of June 26, 1517,³⁶ for a somewhat larger money grant (150,000 crowns by the original treaty, now raised to 200,000 crowns, with an annuity of 12,000 florins). His vote, however, was to be cast for Francis only if two other electors first indicated their preference for the French king.³⁷ Joachim also pledged the vote of Mainz, as French agents agreed to the archbishop's demands for a grant of 120,000 florins for a church at Halle and Francis' support in securing to the archbishop the title of perpetual legate in North Germany.³⁸ The Count Palatine had voluntarily written Francis, stating that he would pledge his vote in return for a sufficient money grant and assurance that the agreement would be kept secret.³⁹ To influence the Bohemian vote, Francis sent agents to the King of Poland, uncle and guardian of the young King of Bohemia, to promise an annual pension of 20,000 crowns if Francis would be elected.⁴⁰

Francis had thus overcome the advantage which had been won for Charles at the Diet of Augsburg and again had a majority of the electoral college pledged to vote for him. King Charles, however, was yet unwilling to concede defeat; he even refused to consider supporting his brother, Archduke Ferdinand of Austria, as a candidate better able

³³ Marechal de Fleuranges, *Memoires* (2 vols., Paris, 1913), I, 248; Weicher, *op. cit.*, p. 214. This interview took place on March 14, 1519.

³⁴ Fleuranges, *op. cit.*, II, 249; Weicher, *op. cit.*, pp. 232-33.

³⁵ Fleuranges, *op. cit.*, II, 250-52; Mignet, *op. cit.*, p. 235. Barrillon seems to have been unaware of the embassy to Bonn, for he says (*Journal*, II, 118) that no one was sent to the Archbishop of Cologne.

³⁶ See above, p. 24.

³⁷ Mignet, *op. cit.*, p. 236; Weicher, *op. cit.*, pp. 85-86.

³⁸ On March 14, Leo X actually wrote the Archbishop of Mainz, promising to make him perpetual legate if he voted for Francis; Mignet, *op. cit.*, p. 236; *Calendar of State Papers: Venice, 1509-19*, p. 513.

³⁹ Mignet, *op. cit.*, pp. 235-36.

⁴⁰ Barrillon, *op. cit.*, II, 117-18; *Calendar of State Papers Venice, 1509-19*, p. 537.

to defeat Francis.⁸⁰ In February, Charles had sent his agents to compete with those of Francis for the favor of the electors, instructing them to secure the election no matter what it might cost. The chief of Charles' agents were De Berghes and Armestorff, with Cardinal Gurck, Walkenstein, Sarentein, Villenger, Renner, and Ziegler as subordinates.⁸¹ De Berghes was sent to win the support of the Swiss and the Swabian League, whose troops Sickengen had lately been engaged to command. The mission was completely successful and was especially significant because the League was just then concluding a successful war against Duke Ulrich of Wurtemberg and therefore had a formidable military force mobilized and ready for action.⁸² De Berghes' success was of permanent value, for when Bonnivet and Brander tried to re-attach Sickengen to the French service, they found him unmoved by their offers.⁸³ Once more the significance of money in the contest was revealed. De Berghes pointed out to his master, "In this affair of the empire we must not haggle at any fixed sums. Fresh disbursements of money will constantly be required, as these devils of Frenchmen scatter gold in all directions."⁸⁴

In Germany, Armestorff and the other representatives of Charles were also meeting with success. It was here that the key to the whole situation lay, and on February 27, Armestorff notified Charles, "If we can get these three [Mainz, Cologne, and the Palatinate] in good trim, the fourth [Brandenburg] will not abandon them, for fear of forfeiting his share of the spoils."⁸⁵ So the Spanish guns were trained on the Archbishop of Mainz, and, though he was at first distrustful, by the end of March both his vote and that of the Count Palatine had been promised to Charles—in return for great pensions. The Archbishop even showed to Armestorff the offers received from France, revealed what he knew of the negotiations between Francis and the other electors, and undertook to win over his brother Joachim with the argument that national feeling in Germany would prevent the election of the French King.⁸⁶ At the end of March, the four electors of the Rhine

⁸⁰ Le Glay, *op cit*, II, 304, 309-10; Mignet, *op cit*, pp 238-39; Brewer, *op cit*, I, 305-6.

⁸¹ Mignet, *op cit*, p. 240; Barrillon, *op cit*, II, 122; Le Glay, *op cit*, pp 221-23.

⁸² Mignet, *op cit*, pp 246-48; Le Glay, *op cit*, II, 307 ff

⁸³ Fleurange, *op cit*, II, 243; Barrillon, *op cit*, II, 119

⁸⁴ Brewer, *op cit*, I, 307.

⁸⁵ *Ibid.*

⁸⁶ Mignet, *op cit*, pp 240-43; Weicher, *op cit*, pp 124-48; Brewer, *op cit*, I, 308. It was only a few days after this that Joachim of Brandenburg promised that the vote of Mainz should be cast for Francis. See p. 28.

Francis and Charles were already powerful monarchs, and should either of them succeed to the Empire, the balance of power in Europe would be seriously disturbed. Henry, of course, would not have expressed the problem in those terms, but the idea seems to have been in part at least the basis of his attitude.⁵⁵ Henry, however, wished to ascertain the intentions of the pope before disclosing his own true designs; but rather than to divulge the keen interest of the English court on the question of the election and possibly to endanger the French alliance, he determined to make an attempt to secure this information indirectly. On February 19, therefore, Wolsey sent to Campeggio, the papal legate in England, a letter asking him to discover what the attitude of the pope toward Francis and Charles was, and whether he would prefer a third candidate, "a German elector or some other person"⁵⁶ The papal reply seems to have been favorable to the latter suggestion, for at a banquet on March 20, Campeggio told Guistinian that he would not approve the election of either Francis or Charles,⁵⁷ and Minio has left numerous indications from the first that Pope Leo X favored Francis only as the lesser of two evils.⁵⁸ With this assurance,⁵⁹ Henry and Wolsey could now begin to negotiate more directly with the Pope. On March 25, therefore, Wolsey wrote to the Bishop of Worcester, English representative at the papal court that "as the pope and the king are of one mind touching this election, they can open their minds more freely and the negotiation will be carried on in the usual channel."⁶⁰ Pointing out the great danger to world stability involved in the elevation of either Francis or Charles as emperor, Wolsey instructed Worcester to urge that the pope strive to maintain a balance between these two contestants and suggested that if Francis could be persuaded to withdraw, then England and the pope might act together to choose some third candidate agreeable to all

⁵⁵ This thesis is best supported in Wilhelm Busch, *Drei Jahre Englischer Vermittlungspolitik* (Bonn, 1884), Chap. 2.

⁵⁶ Busch, *op cit*, pp 35-36. The existence of this letter seems to have escaped practically all writers on the election of 1519. It is printed (in Italian) in *Archivio Storico Italiano* (3rd series, Rome, 1877), XXV, 383-84.

⁵⁷ Guistinian, *op. cit*, II, 261-62.

⁵⁸ *Calendar of State Papers Venice, 1509-19*, pp 494, 501-02, 523, 529-30.

⁵⁹ I think there is no doubt that an answer had been received before March 25, from the evidence in Wolsey's introductory remarks in his letter of that date to the Bishop of Worcester; see *Letters and Papers*, III, Pt. 1, pp 43-44. In his *Henry VIII* (London, 1682, p 82), Herbert states that Henry became a candidate "because the Pope, as I find by our Records, encouraged him thereunto."

⁶⁰ *Letters and Papers*, III, Pt 1, p 43

parties. In making this suggestion, Worcester was "to watch the Pope's countenance and endeavor to discover his secret thoughts."⁸⁰ Wolsey continued, intimating that the idea had come from Campeggio, that if a favorable opportunity should appear, "it will not be inappropriate in you to remark that you think it would be highly conducive to the interests of Christendom and of the Holy See, if His Majesty [Henry VIII] could be prevailed upon to undertake so responsible a dignity, for all the king's endeavors would be concentrated on universal tranquillity and the good of mankind."⁸¹ Worcester should point out, however, that since Henry VIII had refused the imperial crown when it was offered to him by Maximilian, it was to be feared that he could hardly be prevailed upon to accept it in 1519. "You may then suggest that if his Holiness would write to me [Wolsey] very earnestly about the matter, I might without any great labor, exhort and encourage the king to consent to his election, purely out of his desire to promote the welfare of others. In handling this matter, marvellous dexterity and skill will be required."⁸²

Worcester's reply was not written until nearly the middle of May⁸³ and held out no hope that the pope would support the project which Wolsey had so cautiously suggested. Rather, the pope chose not to see the point at all, but attempted to divert the English scheme by declaring that, out of deference to Henry and Wolsey, he would support Charles, thus sacrificing his own inclinations.⁸⁴

Meanwhile, Henry VIII had determined to enter the contest without awaiting the pope's response and to send his secretary, Richard Pace,

⁸⁰ *Ibid.*, p. 44.

⁸¹ *Ibid.*, p. 44, Brewer, *op. cit.*, I, 313

⁸² *Letters and Papers*, III, Pt. 1, p. 44

⁸³ Busch maintains this letter was sent in mid-April. The length of time ordinarily required for the transmission of communications between England and Rome would indicate that this was wholly possible, and it was in mid-April that Leo X shifted his support from Francis to Charles, a move possibly due, in part at least, to Worcester's communication of Wolsey's instructions of March 25. Had such a letter been received before Pace's departure, however, he would surely have taken it with him. The fact that it was forwarded to him on May 20 would seem to indicate that it must have arrived in England between May 14 and May 20.

⁸⁴ *Letters and Papers*, III, Pt. 1, pp. 91-92; Minio's dispatches indicate the pope really desirous of a third candidate, probably the King of Hungary or one of the electors themselves (*Letters and Papers*, III, Pt. 1, pp. 517, 523, 529-30). From the papal point of view, the elevation of Henry must have been almost as objectionable as that of Francis or Charles.

into Germany to seek the elevation of the King of England to the imperial throne.⁶⁴

Pace's original instructions, dated May 11, 1519, were addressed to the electors of the Empire and indicate clearly the policy which Henry had determined upon with regard to his own candidacy. They pointed out that the electors were faced with a great responsibility: they must choose an emperor favorable to universal peace and competent to protect Christendom. Henry expressed the hope that the electors would proceed with unanimity and offered his assistance in maintaining their rights "with all the resources of his kingdom." In conclusion, the instructions declared that the electors might learn further from Pace ". . . in what mind we are towards you and with what great pains we seek your peace, union and freedom from care." ⁶⁵ Pace arrived at Calais ⁶⁶ on May 14 somewhat fearful that a French agent had been sent to tell Francis of his departure and rouse suspicion as to his purpose. Pace, therefore, wrote Boleyn that, if the latter should hear any sinister report concerning the journey, he should declare that Pace had been sent only to be present at the election; but if he heard nothing, Boleyn should remain silent concerning Pace's mission of purpose.⁶⁷ Every precaution was taken to guarantee the secrecy of Pace's mission. On May 16 the Duke of Norfolk, Lord Treasurer, told Guistinian that Henry was taking steps to secure the freedom of the election, which "he is of the opinion ought not to fall on either of these two kings, but rather on one of the great princes of Germany, which seems to be the universal belief, and also the wish." ⁶⁸

Additional instructions were sent to Pace under date of May 20, revealing Henry's plans and methods in striking fashion. It was now made to appear that Henry's action was the result of papal advice,⁶⁹ and assurance was given that the electors would be recompensed for their support of the English King. Pace, however, was to make no promises

⁶⁴ Pace, "a man of the new learning," was a great favorite of the king. He had frequently visited Germany and Italy, was acquainted with all the distinguished men and potentates of the time, and had visited every scene of the drama on which the attention of the world was just then fixed (*Letters and Papers*, III, Pt. 1, p. xix; Brewer, *op. cit.*, p. 311).

⁶⁵ *Letters and Papers*, III, Pt. 1, p. 74; Bucholtz, *op. cit.*, III, 673.

⁶⁶ He reported that the crossing had made him very seasick, and he delayed his journey here a day to recover (*Letters and Papers*, III, Pt. 1, pp. 75-76).

⁶⁷ *Letters and Papers*, III, Pt. 1, pp. 75-76.

⁶⁸ Guistinian, *op. cit.*, II, 270.

⁶⁹ *Letters and Papers*, III, Pt. 1, p. 80. This declaration was undoubtedly based upon the papal reply to Wolsey's letter of March 25.

without adequate security, and no money was actually to be delivered until Henry's election had been effected.⁷⁰ In dealing with the various electors, Pace was directed first to discover their inclinations toward Francis or Charles, and whenever "he speaketh with the favorers of the French King, he may use words to show [Henry's] inclination to that party, . . . and in similar manner he is to use himself to such of the electors as incline to the King of Castile's party, so that [the English monarch] be not noted to favor or advance the one party more than the other."⁷¹ On all occasions, however, Pace should insinuate objections to the prejudice of both Francis and Charles and find means "by provident and circumspect drifts" to drive the electors to choose Henry, "which is German tongue," or, failing that, one of themselves, "and not to translate the Empire, which has been in Germany for 700 years, to a strange nation; for if it were eftsoons so translated, it should never return to them again."⁷²

Henry was thus carrying his duplicity to extreme lengths, attempting to cut support from under both Francis and Charles, while surreptitiously promoting his own cause. But the most striking feature of Henry's instructions were the monetary stipulations. The directions for Pace to enlarge upon the numerous gifts ". . . of grace, fortune and nature which be in the king" and his fitness for the imperial dignity are wholly understandable; but the failure to provide Pace with money and the declaration that the payment of any promised pensions would be made only after the election of Henry seem to indicate an extraordinary ignorance of the true situation. With both Francis and Charles pouring large sums of cash into Germany, Henry's cautious financial arrangements could scarcely be expected to succeed.

Pace's first reports from the continent, nevertheless, held out great hopes of success. On May 21 he declared that, with so many contradictory rumors current, no certainty was possible, but expressed his belief that "he that shall come last after the great practices passed shall be in as good and peradventure better case than they that came long before" and that "our matters may come to good effect."⁷³

On his arrival at Cologne (May 29), Pace found a great preference for Charles over Francis, with both candidates spending great sums of

⁷⁰ *Letters and Papers*, III, Pt. 1, p. 80; Brewer, *op cit*, I, 315.

⁷¹ *Letters and Papers*, III, Pt. 1, pp. 80-81; Brewer, *op cit*, I, 314-15.

⁷² *Letters and Papers*, III, Pt. 1, p. 81; Brewer, *op cit*, I, 315.

⁷³ *Letters and Papers*, III, Pt. 1, pp. 83, 84; Brewer, *op cit*, I, 316.

money. "The Electors are in great perplexity, for this nation will have no French emperor. They would not have the king of Aragon if they could avoid it," on account of his great power.¹⁴ Both Swiss and Swabian forces were being collected to oppose Francis.¹⁵ Pace continued the English dissimulation by declaring that he had been sent to be "indifferent in this great cause," and to be present at the election for Henry's honor and to exhort the electors to choose the prince most studious of the peace of Christendom.¹⁶

At Cologne, Pace stayed in the archbishop's castle and made his first bid for an electoral vote, he delivered Henry's letters to the archbishop, who, "plainly confessing that he had not greatly exercised the Latin tongue," had them read by his chancellor. Pace then made an indifferent proposition, "advancing no one prince more than any other." The archbishop did not actually say whom he would support, but Pace was convinced that he intended to promote Charles. It was arranged that the conversation should be continued at Frankfort, and Pace concluded that he had not made a bad beginning.¹⁷

From Cologne, Pace proceeded to Mainz, where he heard that Joachim of Brandenburg and the Archbishop of Mainz were preparing to leave for Frankfort on the following morning and hastily sought interviews with both. Joachim assured Pace that Francis would not be elected, but further than that he would not go.¹⁸ The Archbishop of Mainz also received Pace and indicated his desire to support the fittest candidate, the one best able to protect his subjects and the Christian religion, and declared further that Henry's promise of aid and protection would have a big effect on him.¹⁹

From Mainz, Pace moved on to Frankfort, where the electors were gathering to make their choice. Here he secured an audience with the Archbishop of Treves, who declared that Henry was not excluded

¹⁴ *Letters and Papers*, III, Pt. 1, p. 90

¹⁵ *Ibid.*, p. 91

¹⁶ *Ibid.*

¹⁷ *Letters and Papers*, III, Pt. 1, pp. 96-97, Brewer, *op cit*, I, 316. Pace's hopes that the conversation might be continued at Frankfort were doomed to disappointment. Fleuranges saw the Archbishop of Cologne as the latter passed through Coblenz on his way to Frankfort and declared that the archbishop informed him the new emperor would be a German or a Frenchman (Fleuranges, *op cit*, I, 255.)

¹⁸ *Letters and Papers*, III, Pt. 1, p. 101. Joachim's insincerity is indicated in the fact that during the interview, Francis' agent, Bonnivet, was seated behind a tapestry in the same room, from which position he heard the entire conversation (*Letters and Papers*, III, Pt. 1, p. 183; Brewer, *op cit*, I, 319)

¹⁹ *Letters and Papers*, III, Pt. 1, pp. 106-07

from being elected and that Maximilian had "gone about" to promote him. Pace, in accordance with his instructions, seized upon this opening to urge Henry's qualities. The archbishop declared that if Pace had authority to show Henry's mind to the other electors as he had to him, "they would have great respect in the election to Henry's honor."⁸⁰ But further satisfaction was not forthcoming, and shortly after this interview all foreigners were ordered out of the city until after the election.⁸¹

During the days which followed, Pace sent frequent reports to England, emphasizing the existence of great dissension among the electors and the popular hatred of the French.⁸² As the days passed, the excitement became intense: Francis promised double what any other Christian prince would give for the Empire, and the agents of Charles greatly increased their offers.⁸³ Still Pace continued to send hopeful reports. On June 12 he declared that "Henry VIII will undoubtedly be proposed at this election," and that he had been asked whether he had the authority to accept the Empire *eo nomine*,⁸⁴ and on the next day he wrote that he expected hourly tidings of Henry's election through the efforts of the Archbishops of Mainz and Cologne.⁸⁵ His enthusiasm on the 20th was tremendous; if he had only come fifteen days sooner, and if he but had 420,000 florins at Frankfort to match that of Charles, "Wolsey would by this time have sung the *Te Deum laudamus* for the election of King Henry VIII in *imperatorem omnium Christianorum*," and success might yet be had if sufficient funds should be made available to Pace.⁸⁶ His enthusiasm waned quickly, however, as letters arrived from the pope ordering his agents no longer

⁸⁰ *Letters and Papers*, III, Pt 1, p 101, Brewer, *op cit*, I, 316.

⁸¹ This action was taken on June 9 (*Letters and Papers*, III, Pt. 1, pp 101-02). Bonnivet, under the name of Capt. Jacob, remained at the Chateau Rudesheim, a short distance from the city, until after the election, from where he secretly continued negotiations with Frederick of Saxony and Joachim of Brandenburg (Fleuranges, *op cit*, I, 249; Du Bellay, *op cit*, I, 94; Barrillon, *op cit*, II, 145).

⁸² *Letters and Papers*, III, Pt 1, pp 102, 104, 105, 108; Brewer, *op cit*, I, 316-17.

⁸³ *Letters and Papers*, III, Pt 1, pp 113, 114, Brewer, *op cit*, I, 317. As an example of the extreme offers being made, Bonnivet promised the Count Palatine the sister of Francis in marriage, with a dowry of 200,000-300,000 florins, payment of 200 horse by the French government during the Count's lifetime and protection to his country against any damages which might be attempted on account of his vote (Mignet, *op cit*, p. 259; Weicher, *op cit*, pp 352-54).

⁸⁴ *Letters and Papers*, III, Pt 1, p 107, where it is misdated May 14.

⁸⁵ *Letters and Papers*, III, Pt 1, p. 108.

⁸⁶ *Ibid*, p 113, Brewer, *op cit*, I, 317.

to oppose the election of Charles and the people gave unanimous support to the King of Spain.⁸⁷ On June 22, Pace averred, "Here is the most dearest merchandise that ever was sold, and, after mine opinion, it shall be the worst that ever was bought, to him that shall obtain it,"⁸⁸ and on the 24th he maintained that if Henry were elected, his realm would be undone, for the electors intended to bind any prince to live in Germany all his life, which would be the ruin of England; besides "this nation is in such dissension that it is impossible for all the princes of Christendom to reduce it to good order."⁸⁹

In Frankfort, meantime, the electors secured from both Francis and Charles written releases from their promises,⁹⁰ and on June 18 they heard mass in the church of St. Bartholomew, after which they took the required oath⁹¹ to vote for whom they considered best fitted and swore that they were bound by no pact or engagement.⁹² The actual election occurred on June 28. Both Francis and Charles were placed in nomination, the claims of the former being urged by the Archbishop of Mainz, those of the latter by the Archbishop of Treve.⁹³ Frederick, the Elector of Saxony, was put forward as a compromise candidate, but he declined in favor of Charles, whom he preferred as being of German extraction, whereas Francis was a stranger "to our language, to our blood and to our country."⁹⁴ Charles was thereupon unanimously elected, and the great contest was over.⁹⁵

Even now the English dissimulation was continued. Pace received the news of Charles' election at Mainz and at once informed Wolsey he would go to Frankfort to congratulate the Spanish ambassadors, "for I have so handled them that they have written to their king that my coming here has done them good service."⁹⁶ From Frankfort he reported (July 3) that since the election he had "found means that the Archbishop of Mainz, the Duke of Saxony and the Archbishop of

⁸⁷ *Letters and Papers*, III, Pt. 1, p. 115

⁸⁸ *Ibid.*, p. 114

⁸⁹ *Ibid.*, p. 116

⁹⁰ Le Glay, *op. cit.*, II, 437; Weicher, *op. cit.*, p. 152; Mignet, *op. cit.*, pp. 255-56.

⁹¹ By the terms of the Golden Bull, the electors were required to swear that they were free from all engagements to vote for any particular person

⁹² Mignet, *op. cit.*, pp. 257-58.

⁹³ *Ibid.*, pp. 262-63; Brewer, *op. cit.*, I, 318-19. Both of these electors had been interviewed by Pace; obviously his work was having little effect.

⁹⁴ Brewer, *op. cit.*, I, 319; Mignet, *op. cit.*, p. 263; William H. Prescott, *The Reign of Charles V* (3 vols., Boston, 1902), I, 434.

⁹⁵ Brewer, *op. cit.*, I, 319; Weicher, *op. cit.*, pp. 366-67; *Letters and Papers*, III, Pt. 1, p. 118.

⁹⁶ *Letters and Papers*, III, Pt. 1, p. 118

Cologne should declare to the ambassadors of Charles how largely Henry's letters, Pace's proposition and other secret practices have advanced their master's cause,"⁹⁷ and at the same time he roundly criticized the pope for his "double practices" in regard to the election.⁹⁸ As his contribution to the project of deceiving Charles as completely as possible, Henry "caused a solemn mass to be sung at St. Paul's the eighth day of July . . . and that night there were solemn fires made through London and great plenty of wine given by Italians, Duchmen [sic] and Spaniards" in honor of the elevation of the King of Spain."⁹⁹

It seems obvious that Henry was never seriously considered by the electors as a candidate for the imperial throne in 1519; at no time did he have the promise of a single electoral vote, and his name was not put in nomination when the electoral college met. Of the causes for his complete failure to gain consideration, undoubtedly his unwillingness to provide money in order to attach adherents to his cause was of great importance. Arguments advanced in his favor, however sound, could hardly be convincing against the actual monetary benefits which both Charles and Francis had been lavishing upon the electors. As Fleuranges mockingly observed, "The English angels could not work greater miracles than the crowns of the sun."¹⁰⁰ Henry may have sincerely intended to reward the electors once his election had been accomplished, for Guistinian reported on June 9 that at the royal mint "gold nobles are being coined with great alacrity, which is very unusual."¹⁰¹ But gold in England could scarcely be expected to extend its glitter across the Channel into Germany, and Pace's mission was foredoomed to failure. He was courteously but coldly received, the electors being wholly indifferent to a cause which came recommended with empty hands.¹⁰²

Henry's delay at entering the contest also decreased his chances of success. The election was so near at hand that to overcome the early campaigning of Francis and Charles was quite an impossible task. Pace was able to see but four of the electors, and then only for short interviews, the audiences being quite insufficient for the purpose he had been sent to accomplish. In a letter of June 10 he complained of the

⁹⁷ *Letters and Papers*, III, Pt. 1, 122.

⁹⁸ *Ibid.*, p. 123.

⁹⁹ Edward Hall, *Henry VIII* (edited by Charles Whibley, 2 vols., London, 1904), I, 178-79.

¹⁰⁰ Fleuranges, *op cit*, I, 259.

¹⁰¹ Guistinian, *op cit*, II, 274.

¹⁰² Brewer, *op cit*, I, 316; *Letters and Papers*, III, Pt. 1, p. xxv.

shortness of time and the great amount of travelling he was forced to do in order to see the electors.¹⁰³

Finally, German nationalism and Henry's lack of military support inevitably prevented the realization of the English King's ambition. That the German people overwhelmingly favored Charles on the ground that he was of German nationality was frequently attested by Pace himself.¹⁰⁴ The nominating speech made by the Archbishop of Mainz in favor of Charles and excluding Francis pointed out that no German prince was strong enough to give Germany security and to re-establish religious unity, but that Charles was of German origin and had territories in Germany. This attitude was likewise expressed by the Duke of Saxony in declining the nomination for himself.¹⁰⁵ These arguments could have been used to exclude Henry just as effectively as Francis. If Henry's nationality was a bar to his election in 1516 and 1517, as Pace and Tunstall had maintained, it was not less true in 1519.

Finally, the fact that Sickingen established himself at Ilhchst, a few miles from Frankfort, with an army of twenty thousand foot and four thousand horse, ready to resort to force for the cause of Charles, was certainly of considerable consequence.¹⁰⁶ In addition, both Pace and Cardinal Sion reported twenty thousand Swiss ready to take the field for Charles.¹⁰⁷

But though Henry's candidacy may have been hopeless, the evidence seems convincing that he undertook it in all seriousness.¹⁰⁸ Henry, but thirty years of age,¹⁰⁹ was proud to the point of vanity, was very vigorous, and ruled an important state. A man of his personality and ambition might logically have aspired to the highest political honor which sixteenth century Europe had to offer. Though even now the emperorship was little more than an empty title and the Holy Roman Empire needed only a Voltaire to give it an adequate characterization, yet its traditions made the prize a tempting one; of all honorable positions,

¹⁰³ *Letters and Papers*, III, Pt 1, p 101.

¹⁰⁴ *Ibid*, pp 103 (June 11), 104 (June 11), 104 (June 12), 115-16 (June 24). On June 18 Pace declared, "The nation is up in arms and furious to fight for the King Catholic", on the 17th the Count of Nassau had told Pace that he had so much money and so many men that no Frenchman should enter the country "but upon spearis and swerdis points" (Brewer, *op cit*, I, 318).

¹⁰⁵ See above, p 38; see also Mignet, *op cit*, p 262; Brewer, *op cit*, I, 318-19.

¹⁰⁶ *Letters and Papers*, III, Pt. I, pp. 90, 96, 104, 107; Mignet, *op cit*, p. 257; Fleuranges, *op cit*, I, 258; Brewer, *op cit*, I, 318.

¹⁰⁷ *Letters and Papers*, III, Pt 1, pp 86-87, 90, 104.

¹⁰⁸ A contrary view may be consulted in A F Pollard, *Henry VIII* (new impression, London, 1919).

¹⁰⁹ Charles was 19 and Francis 24.

only the papacy surpassed it. Further, the emperor had long been regarded as having a peculiar leadership in the maintenance of the Faith, a problem in which Henry had shown considerable interest; indeed, only recently his refutation of Luther had won for him the title of Defender of the Faith.

Furthermore, Henry might logically have expected some papal assistance in his effort, not merely because of gratitude for Henry's anti-Lutheran stand, but also because, if either Charles or Francis should succeed, the victor's power would be dangerous, not only for the unsuccessful contestant, but for the pope as well ¹¹⁰

The mission of Pace and the nature of his instructions lead to the conclusion that Henry's intentions were wholly serious. Pace was not only to raise objections to Charles and Francis, but also to promote the cause of the King of England, endeavoring to win the electors to him as the best available third candidate. Henry probably regarded himself as the most logical compromise choice and as the ruler most able to protect the balance of power from being disturbed through the elevation of either of the continental rivals to the imperial dignity. In June, Henry considered sending a second representative to assist Pace in his efforts, ¹¹¹ an action clearly illogical unless there was genuine concern that the project should succeed. And on June 28, the very day on which the election was decided, Henry, in accordance with a request made by Pace on June 20, ¹¹² signed letters authorizing financial obligations to game according to the rules of Charles and Francis. Of course, this action came too late to be of any effect, but it constitutes good evidence of Henry's determination to become emperor.

¹¹⁰ This was the basis of the pope's long opposition to Charles, who had important holdings in Italy (*Letters and Papers*, III, Pt 1, p 48)

¹¹¹ This step was opposed by Wolsey (*Letters and Papers*, III, Pt 1, p 105).

¹¹² *Letters and Papers*, III, Pt 1, pp 112-13
the electors, ¹¹³ thereby indicating that at last he had decided to play the

¹¹³ *Ibid*, p 123

REST PERIOD RESPONSES AND COLD RESISTANCE IN THE RED RASPBERRY IN RELATION TO THE BREEDING OF HARDY VARIETIES¹

CHESTER DRUSE SCHWARTZE

Freezing to death of bud and cane tissues is the cause of an important type of winter injury of red raspberries in Washington. Field observations over a three-year period supplemented by artificial freezing experiments show that red raspberries are much more susceptible to freezing injury in western Washington, where the winters are relatively mild, than in eastern Washington, where relatively lower winter temperatures usually occur. The greater susceptibility in western Washington results largely from a lack of hardening temperatures. The threshold value for the hardening of red raspberry buds is approximately 40° F. Under the same environmental conditions, Cuthbert and Golden Queen are much more susceptible to freezing injury than are Marlboro, Antwerp, Lloyd George, Chief, King, Latham, Viking, and Newman. Rapid freezing is more injurious to red raspberry buds than is more gradual freezing, but no significant differences result from rapid and gradual thawing. A decrease of cold resistance results from exposure of dormant canes to relatively high temperatures even though no visible growth responses occur.

Experimental data indicate that a rest period is initiated in red raspberry buds several weeks before terminal growth of the canes ceases. The rest period ends more quickly at temperatures somewhat above 32° F. than at much lower temperatures. At 70° F. the rest period is greatly prolonged. The length and profoundness of the rest period have a marked influence upon the winter hardiness of varieties in the mild winter climate of western Washington. The time of maturity of the canes and the length of the rest period are indicative of the relative hardiness of varieties and their hybrids.

The moisture content of the buds is indicated as a useful criterion for judging comparative cold-resistance of varieties within a given locality. Analyses of buds for carbohydrate fractions show that Cuthbert is less well supplied with these substances than are the more resistant varieties. The possible significance of the carbohydrate fractions and total ether extract is discussed.

¹ Abstract of a dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Agriculture (Horticulture), State College of Washington (1935)

THE MAKING OF THE *SHEPHEARDES CALENDER*

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In an earlier article¹ the idea was advanced that many of the eclogues of the *Shepheardes Calender* were written as individual pieces before Spenser had planned the entire work and that these earlier pieces were subsequently fitted into the larger whole, somewhat hastily but as well as circumstances would permit. Once this view is accepted, certain questions naturally arise: Which eclogues antedate and which follow the plan of the whole, when were the various parts of the work written, and how were these independent pieces welded into as unified a group as they now form? The primary purpose of this paper is to answer these questions as well as may be done by collecting and interpreting the pertinent information from the *Calender* and, when a definite answer is impossible, to suggest the most plausible hypothesis. The discussion incidental to this work may well throw at least a few rays of light on the growth of Spenser's art and the events of his life before his departure for Ireland as secretary to Lord Grey.

First, however, the known facts of Spenser's life during the time when he was probably engaged in the work should be briefly noted, as they may serve to date some of the pieces either directly or by furnishing a guide to interests which were dominant in Spenser's mind at various times in this period and which might therefore be expected to appear in his verse. After his graduation from Cambridge on June 26, 1576, we next hear of him in 1578 as secretary to John Young, Bishop of Rochester. Tradition, supported sometimes by very little evidence, has filled the intervening months by a sojourn with kinsfolk in the north

¹ Roland B. Botting, "The Composition of the *Shepheardes Calender*," *PMLA*, L (1935), 423-34. The thesis of Mary Parmenter ("*Spenser's Twelve Aeglogues Proportionable to the Twelve Monethes*," *ELH*, III [1936], 190-217)—that some of the eclogues may be, by their relation to special religious and folk observances characteristic of the month, better fitted to their places than we have previously thought—has not caused me to modify the opinion expressed in my earlier article. Lack of relation between the pastorals and the months they represent is but one of several sorts of evidence that Spenser had written many of the individual poems before he conceived the *Shepheardes Calender*; besides, we cannot be sure how many of the connotations of the months which Miss Parmenter gleans from "calendars" and almanacs were immediate and fundamental enough parts of his consciousness to have influenced his writing. Those which were may just as probably have guided him when he came to look through the work he had already done in order to select pieces for inclusion in the *Calender* and as he assigned the poems selected to places in the framework of the months.

of England, a possible journey to Ireland, and that perpetually attractive riddle of Spenserian biographers, the Rosalind episode; but the evidence that any of these came at this time is extremely weak. The *Calender* supplies none at all that Spenser ever made either journey, and, to anticipate what will appear later, the information it gives concerning Rosalind suggests that she and Spenser met while he was employed by Bishop Young.

How early the secretaryship may have begun, we cannot be sure; but from a note in Harvey's copy of Turler's *Traveiler*,² we know that Spenser was with Young during at least some part of 1578. Inasmuch as Young did not assume his new office until April 1 of that year, there is no reason to believe that the poet's official connection with him was earlier, though there may previously have been some sort of unofficial relationship. Taking into account the time when Spenser probably left Young's employ (perhaps as early as December, 1578) and the amount of literary work he appears to have done while there (at least several of the eclogues of the *Shepherd's Calender* and not improbably some of the lost works), it seems most reasonable to assume that the secretaryship began about April 1.

Similarly the date of the end of the association is uncertain. The one pertinent fact of this period of which we can be sure is the gift of *The Traveiler* to Harvey, and our most specific information as to the date of that gift comes from the note, "legi pridie Cal Decembres. 1578 Gabriel Haruey,"³ which is to be found on page 192 of that volume. Lacking information as to how steadily and how fast Harvey read, we can do little more than guess that the date of the gift, made while Spenser was still a member of Young's circle, may have been as late as October or perhaps November. On the other hand, on December 20, 1578, he was in London, as Harvey tells us in a note⁴ in his copy of *Howleglas*. Because Spenser may have been on Young's business in the capital when he and Harvey made their agreement about the reading of *Howleglas* or perhaps was there especially to meet Harvey, it is uncertain, though distinctly probable, that the poet had then joined Leicester's circle. There is, however, conclusive evidence that he was established in London by October of the following year. On the sixteenth of that month, he sent Harvey a letter from which we learn that

²G. C. Moore Smith, *Gabriel Harvey's Marginalia* (Stratford, 1913), p. 173.

³*Ibid.*, p. 174.

⁴*Ibid.*, p. 23.

he was then spending some of his time at Leicester House; that "the twoo worthy gentlemen, Master Sidney and Master Dyer" had him "in some use of familiarity"; that he met them now and then at Court, inasmuch as he promises to show them some of Harvey's verse at his next visit; that he had already tasted "some sweetnesse" of "gaine and commoditie" from the relationship; and that, on October 5, he was expecting to be sent abroad by Leicester.⁶ These conditions make it sufficiently certain that Spenser had left Young's employ a considerable time, at least several months, before October 5, 1579. Though E. K.'s epistle to Harvey, the postscript of which is dated April 10, 1579, supplies no certain information as to Spenser's whereabouts, the statement that a dedication to Sidney was planned certainly implies⁶ a connection between the poet and that "special favourer and maintainer of all kind of learning" before April 10, 1579. It cannot be argued from another phrase, "him selfe being for a long time furre estraunged," that Spenser was not then in London, for examination of the context shows that it was offered in partial explanation of the writer's pretended temerity in publishing the *Shepheardes Calender* without the poet's consent. As there is reason to believe that Spenser planned and supervised the publication himself,⁷ we cannot rely upon the sincerity of E. K.'s remark. Summarized, this evidence, together with the amount of work probably done on the *Shepheardes Calender* between the change of employment and April 10, 1579, when the *Calender* must have been virtually complete, inclines one to choose a date for the change comparatively close to December 20, 1578, the time of the agreement with Harvey concerning *Howleglas*.

From E. K.'s epistle to Harvey it is clear that, by April 10, 1579, the *Shepheardes Calender* was nearly, if not quite, ready for the printer

⁶ It is doubtful that by October 16 he had still the same hope, for he then wrote Harvey, "You shall see, when we meete in London, (whiche when it shall be, certifye us,) howe fast I have followed after you in that course." The words "whiche when it shall be, certifye us" certainly imply that he did not expect to be long or soon absent from London, but the implication is somewhat weakened by that of another statement in the same part of the letter, "But I would rather I might yet see youre owne good selfe, and receive a reciprocall farewell from your owne sweete mouth."

⁷ Unless, as Dr Percy W Long ("Spenser and Sidney," *Anglia*, XXXVIII [1914], 180) suggests, the statement is an interpolation. As the suggestion rests upon the loose reference of *whose*, the evidence is not entirely convincing, for such niceties seem to have been of much less concern to the Elizabethans than they are to us. Furthermore, I can see no greater probability that E. K., if he were sensitive to such things, should have interpolated a sentence loosely related to the rest of the passage than that he should have written it so in the beginning.

⁸ See his letter to Harvey of October, 1579, and Botting, *op cit*, pp 433 f

There is little reason to suppose that much more work was done on it until shortly before October 15, 1579, when the project of publication was again apparently under serious consideration.⁸ Finally, on December 5, the copy was entered at Stationers' Hall. Of so much are we reasonably certain concerning the way in which Spenser spent his time while he was occupied in the composition of his first original publication.

There are other events pertinent to our purpose which must have taken place during this period but which cannot now be dated with certainty. At some time Rosalind must have occupied a central position in Spenser's mind, and likewise, during the same general period, Spenser must have taken to himself the name of Colin Clout. Presumably it was after both these events that he conceived the idea of gathering into a publishable group some of the poems he had already composed. Then, last of all, the calendar theme must have been thought of, and the revisions and additions necessary to the material at hand must have been made.

Of all these events (both these just mentioned and those of which the time indication is more certain), the eclogues often bear fairly discernible marks, and it is with reference to these happenings that the attempt to date them must be made. The strength of this sort of evidence naturally depends upon the degree to which Spenser was telling the truth as he wrote or was deliberately, for artistic or other purposes, misrepresenting his situation in the figure of Colin. For that reason, then, one must proceed cautiously; but it is surely not being too credulous to assume, for example, that the eclogues in which Colin appears must have been written after Spenser assumed that name, that those dealing with Rosalind must have followed his acquaintance with her, that a poem showing no trace of any of its unifying themes was written before the *Calender* was planned, and that those alluding almost exclusively to ecclesiastical affairs were composed during Spenser's employment with Young.

This type of evidence indicates that *March* may have been composed earliest of all the parts of the *Shepherd's Calendar*. The tone and the treatment of subject matter⁹ are entirely different from those of the eclogues which bear clear indications of having been composed at Bromley or in London, and the poet's apparent freedom from preoccupation

⁸ See the part of Spenser's letter to Harvey which bears that date.

⁹ See W. L. Renwick's edition of the *Shepherd's Calendar*, p. 187.

with religious or court affairs strengthens the impression of its early date. It is, of course, conceivable that, even when his mind was fullest of ecclesiastical happenings or schemes for political advancement, he consciously set himself the pleasant task of retelling Bion's story or imitating Ronsard's version¹⁰ and carefully excluded all signs of his more immediate interests. Yet that is unlike his way of work at this time; his poetry was not an escape from reality, and he seems usually to have preferred timeliness in his imitations to fidelity to the original. Furthermore, absence of any of the unifying themes of the *Calendar*, the indefiniteness of the time references, and the differences in the character assigned Thomalin here and in *July* make it unlikely that *March* was originally intended as a part of the larger whole. Certainly, without being dogmatic, one may suggest that *March* is one of a number of pastoral imitations made while or shortly after Spenser was at college, when his mind may have been freest for purely literary interests, and that it was selected for inclusion in the *Shepherd's Calendar* because it fitted into a vacant place in the scheme more readily than any of the others at hand and because Spenser thought it a good piece of work.

Though with *February* the situation is somewhat more complicated, it seems clearly to have been written under the influence of Bishop Young. The allusion to Pisces, the sign of February, in *November* makes it likely that the latter eclogue was originally the second of the series and that the present *February* was a comparatively late addition. Yet the probability of an allegory founded upon ecclesiastical affairs,¹¹ and the references to Kent¹² suggest that the debate between Thenot and Cuddie was composed a considerable time before it was made a part of the *Calendar*—in fact, while Spenser was still at Bromley. The

¹⁰ See T. P. Harrison, Jr., "Spenser, Ronsard, and Bion," *M L N*, XLIX (1934), 139-45. Imitation of the poets of the French Renaissance seems more characteristic of Spenser's days in London. This is a reason—in fact, the only one—for regarding *March* as comparatively late; but Spenser's method with borrowed material here is different from that in the pieces which are more certainly later.

¹¹ J. J. Higginson's interpretation of the fable as political satire (*Spenser's Shepherd's Calendar in Relation to Contemporary Affairs*, p. 70) inclines him to an even earlier date of composition. But see Renwick, *op cit*, p. 182; Edwin A. Greenlaw, "The *Shepherd's Calendar*," *PMLA*, XXVI (1911), 428-31; Percy W. Long, "Spenser and the Bishop of Rochester," *PMLA*, XXXI (1916), 730 ff.; A. C. Judson, *A Biographical Sketch of John Young*, *Indiana University Studies*, XXI (1934), 20 f.; Frederick M. Padelford, "Spenser and the Puritan Propaganda," *Mod. Phil.*, XI (1913), 98; Brents Sterling, "Spenser and Thomas Watson, Bishop of Lincoln," *P Q*, X (1931), 321-28.

¹² Lines 74, 93

possible origin of the fable of the Oak and the Briar in Young's *Sermon Preached before the Queenes Maiestie* strengthens the idea, as do the marked similarities of *February* to the more obviously ecclesiastical eclogues in style, meter, and treatment of subject matter. Lack of reference to the central narrative of the *Calender* and the dissimilarity of *Thenot* here and in *April* and *November* clearly show that *February* was not written as a part of the series. Taken together, these conditions can best be explained by believing that *November*, the original February poem, was shifted to its present position after the *Calender* was nearly complete in its first form and that an old piece, possibly somewhat revised but desirable for certain artistic reasons¹² and generally suitable to the position because of its tone and its references to winter, then became the present *February*.

May appears even more clearly to be a product of the same period. The allusion to Archbishop Grindal¹⁴ indicates composition following his sequestration in June, 1577, but how soon thereafter the poem was written may be debatable, for Grindal's situation continued to attract attention until late in 1582, and the interest in the affair of such men of Puritan leanings as Young¹⁵ may have put the question of Grindal's fate in Spenser's mind at almost any time while he was at Bromley. Leicester's generally accepted connection with Grindal's sequestration makes it probable that *May* was written before the poet's acquaintance with Elizabeth's favorite; he would scarcely have written in a way that he thought distasteful¹⁶ to the man from whose patronage he hoped great things. Young, on the other hand, would doubtless have been pleased by this respectful allusion to his old superior and benefactor.¹⁷ Together with this, the peculiarities of style, subject, and point of view make it almost certain that *May* was written while Spenser was still connected with Young and his interests, as were most probably *July* and *September*.¹⁸

¹² Renwick, *op. cit.*, p. 184

¹³ Line 75

¹⁴ Judson, *op. cit.*, p. 18.

¹⁵ Notice that E. K., writing while Spenser was connected with Leicester, is careful to give no hints that might help to identify Algrind either here or in *July*. Perhaps hints would have been superfluous, but that does not always deter E. K. See Herford, p. 151 of his edition of the *Calender*.

¹⁶ Judson, *op. cit.*, pp. 5, 6

¹⁷ For these reasons and because of the date of the postscript of E. K.'s letter to Harvey, it appears that Miss Parmenter's conjecture (*op. cit.*, p. 205) referring the satire of the tale of the fox and the kid to Scottish affairs can be accepted only if one believes Spenser to have been writing in a prophetic vein. It is clear that the fable was written and glossed before "the autumn of 1579,"

Lack of reference to Colin and Rosalind probably indicates a date for *May* before the conception of the calendar idea. In fact, as will be explained later, it is one of the poems that perhaps helped Spenser to his pen-name. Only the specific references to the month in the earlier part suggest composition with the *Shepheardes Calender* in mind, and they admit another explanation. The numerous criticisms¹⁹ of the May Day celebrations in the writings of men of Puritan sympathies show that the topic was timely, one which Spenser may well have seized upon during his residence with Young to introduce and to give immediate occasion to his criticism of the worldliness of one type of pastor. It was common ground for shepherd and cleric, such as was desirable in a pastoral directed ostensibly at one profession and really satirizing the other. If this conjecture is true, the specific allusions to the month perhaps account for the inclusion of this eclogue despite the regard shown for Grindal, which Spenser must have realized might annoy Leicester.

The evidence afforded by *July* is fairly definite. Its similarities to *May* are marked and lead one to believe that the two were written at much the same time: they show a like point of view in religious matters, and, as Mr. Higginson notices,²⁰ they are similar in "their political and ecclesiastical satire and their use of the fable," as well as "their more elementary meters . . . , their separation from the Romance of Colin, and their lack of allusion, in general, to the people of the Court." Other significant details are the appearance of Algrind²¹ and the definite localization of the dialogue in Kent.²² Only the passage²³ in which careful reference is made to the month supports the idea that the plan of the *Calender* preceded the writing of *July*, and that is certainly not decisive, for the twelve lines can be removed with injury to neither sense nor metrical form. Nowhere else in the poem is there any mark of the

when, according to Miss Parmenter, young James of Scotland fell prey to the wiles of the Catholic Esmé Stuart.

¹⁹ It is an interesting coincidence that Archbishop Grindal alludes to the unseemly behavior of the people during the May Day festivities in his *Articles for the Province of Canterbury* (1576). See F. J. Furnivall's edition of Stubbes' *Anatomy of Abuses in New Shakspeare Society Publications*, Series 6, No. 6 (London, 1879), pp. 304 f.

²⁰ *Op. cit.*, p. 42.

²¹ Lines 216 and 228 sound as though the sequestration had taken place at least several months before.

²² See Dr. Leicester Bradner's note (*M. L. N.*, XLIX [1934], 443-45) identifying "St. Brigets Bowre" as the Well of St. Blaze.

²³ Lines 17-28.

season. For these reasons, it would seem that *July* was written sometime during the poet's stay with Young and before the origin of the plan of the *Shepherd's Calendar*²⁴ and that it was subjected to a slight revision when it was made a part of the larger whole.

Though the evidence is not so clear as in regard to *May* and *July*, *September* appears to have been written at much the same time. The discussion of religion, the character of the verse, the use of the fable, reference to Young under the name of Roffynn, absence of allusion to Leicester and other men and women of the Court, and the reference to Kent—all mark the similarity of this to other eclogues which we are able with some confidence to place as products of Spenser's months with the Bishop of Rochester.²⁵ It differs from them only in the appearance of Colin, and that, it has been suggested,²⁶ may have been interpolated to link it to the central character of the series.²⁷ Moreover, it does not have the definite month color that might be expected if Spenser had originally intended it as a part of the *Calendar*. What there is of seasonal setting, as it is quite suitable to Diggon Davie's mood, may well have been introduced to supply a sympathetic background for this picture of the experiences of the good shepherd in contact with the evils of the ecclesiastical world; it certainly does not mark it unmistakably as a September poem.²⁸ Like *May* and *July*, *September* may be

²⁴ This may also be indicated by the variation of the characters assigned Palinode here and in *May*. See Higginson, *op cit.*, pp 197 f. Different characters represented under the same name would be in no way surprising so long as the eclogues in which they appear were quite independent; this condition would be strange, however, if the eclogues were composed as parts of a larger whole.

²⁵ If the story of Roffynn and Lowder refers to Thomas Watson and an attempt to convert Lloyd to Catholicism, the writing of *September* can be dated after February 19, 1578-9, when Young was notified of the transfer of Watson to his custody. But this reference is doubtful. See Judson, *op. cit.*, pp 19, 23; Sterling, *op cit.*, pp 323 f. There is no evidence that Watson made the attempt, and furthermore it is not at all certain that Spenser was still in Young's household when Watson arrived; he was probably living in London by that time.

²⁶ Higginson, *op cit.*, pp 42 f.

²⁷ If so, either the couplet referring to Colin must have been inserted prior to the making of the *Glosse*, or else both it and the note on the passage must be later insertions. The latter seems more likely, for the section beginning "This tale of Roffy" follows the note on Roffy much more naturally than it does the entirely unnecessary one on Colin Clout. It looks as though someone had seized none too good an opportunity to insert a chronicle of Harvey's works and honors. Stripping the cloak from E. K.'s shoulders at this moment might reveal Harvey himself. That he was more than an adviser so far as the *Calendar* was concerned may be assumed from Spenser's words (Letter to Harvey, October 15, 1759), "The selfe former title stil liketh me well ynough, and your fine addition no lesse."

²⁸ E. K.'s effort to do so is noteworthy.

thought to be one of those independent poems which were later worked, with some slight alterations,²⁰ into the fabric of the *Shepheardes Calender*.

It appears that in *April* an early dialogue was used as a pastoral setting for a later song in praise of Elizabeth; for in both style and subject the ode to Eliza bears little relation to the dialogue between Thenot and Hobbinol, and there are certain peculiarities in the rhyme of the earlier part that indicate revision. According to this view, the earliest-composed section of the finished *April* was a poem dealing with Colin's relations with Rosalind and Hobbinol, which was written in four-line stanzas linked thus by rhyme: abab bc bc. Of this original poem stanzas 1, 3, 4, 5, 6, and 7 of the present *April* remain. Stanza 2 is clearly an insertion made during the process of revision; for it is the only part of the whole poem that makes specific reference to the season, it has rhyme links with neither the preceding nor the following lines, the last line of the preceding quatrain rhymes with the first line of stanza 3, and the poem reads as well when stanza 2 is omitted. During this revision one or more stanzas of the original dialogue appear to have been dropped after stanza 5, for although stanzas 6 and 7 are linked in the usual fashion, 5 and 6 have no common rhymes. Stanzas 8 and 9 and the two concluding ones which follow Colin's song are transparent devices to introduce the song in praise of Elizabeth and to end the eclogue; therefore, and because none of them has any rhyme link, they were doubtless written in the process of putting the eclogue in its final form.

The composition of the first form of this dialogue must obviously have followed Spenser's assumption of the name of Colin; because of the reference to himself as "the southerne shepheardes boye," it probably came during the poet's employment with Young, and, to judge from the revisions made in order to fit it into the time pattern of the whole, it appears to have preceded the plan of the *Calender*. There would have been plausible motive for Spenser's writing it either during the wooing of Rosalind, when it may have been addressed to her, or during the making of the *Calender*, when it might have been composed to carry on the Rosalind theme; the latter occasion is impossible in view of the evidence we have here that this part of *April* is the revision of an earlier piece, the composition of which it is impossible to date

²⁰ At least one passage appears to have been deleted subsequent to the making of the *Glosse*, for *soote*, which does not occur in the poem, is explained.

more definitely until the time relation between the Rosalind affair and the period of Spenser's residence at Bromley can be more satisfactorily established.

The second part, with its elaborate stanza, its fine rhetoric, and its flattery of Elizabeth, bears marks of Spenser's contact with Sidney's group and of his own courtly ambitions. He wrote it probably after he had learned something of the ways of the world in securing political preferment and after he had established a reputation as a pastoralist. Its style, similar to that of *January* and the lament for Dido in *November*, is stamped by imitation of other masters than is the style of *February*, *July*, and *September*.

The third stage in the making of *April* was, then, the combination of these two independent poems into the present eclogue. That work doubtless was done after Spenser had decided to construct the *Calendar*, for the only mark of month color is found in a passage that appears to have been inserted at that time with no other reason than to relate this eclogue to the time sequence of the whole. Aside from this insertion of the present stanza 2, this combination involved the omission of some lines after stanza 5 and the composition of the eighth, ninth, and last two stanzas; if more than that was done, no traces were left.

The August eclogue likewise falls easily into two relatively unrelated parts—the singing match and Colin's sestina—and there are indications that, like *April*, it was made by combining earlier pieces. In the first place, the first 138 lines form a unit by themselves, in imitation of the singing match of the classical pastoral. They tell the conventional story and tell it completely. Secondly, neither the sestina nor any of its setting is annotated by E. K. In view of his customary diligence, one feels certain that both escaped his attentions only because they were added after his work was done.

The earlier part bears few marks by which its composition can be dated, although the two references to Colin show that it followed Spenser's assumption of that pseudonym. The sestina appears to portray Colin's feelings after Rosalind had given her favor to Menalcas; thus the earliest time for its composition would have been during the last stage of the association. As the tendency to imitate Italian and French Renaissance models, noticeable here, appears most clearly at that time, it probably dates from Spenser's early days in London. However, it may have been written later, either as a literary exercise or for inclusion in the *Calendar*, at almost any time until it was incorporated

in *August*. The parts were probably combined and the poem completed as we now have it shortly before the *Shepheardes Calender* was published (between October 16 and December 5 if it is accepted that the sestina was not a part of *August* when the *Glosse* was made); for there is little probability that, after the work was once complete and the project of publication had been abandoned for the time, Spenser would have done much work on the poem until he made his final decision to publish. A motive for the inclusion of the sestina at so late a date may be found in a desire to gratify Sidney, who it was now finally decided was to receive the dedication, by an imitation of Sannazzaro, whose work he held in esteem.⁸⁰

The dating of *June* depends largely upon the degree of biographical truth one believes that that eclogue and its notes contain, if, as is usually accepted, the poem tells of an actual change in Spenser's state brought about in part by Harvey, the reference may be to either of two occasions: Spenser's entrance into Young's employ⁸¹ or else his leaving that position for the uneasy realm of court politics. Acceptance of the former depends entirely upon our faith in E. K.'s veracity⁸²; for the text alludes only to hills and dales, "shepheards ritch, and fructfull flocks," which would have served as well or better to mark the contrast between Kent and London, and it is left to E. K. to supply all our information concerning the "North countrye," Kent, and Spenser's journey south "for speciall occasion of private affayres . . . and for his more preferment." Probably E. K. can be acquitted of gratuitous deception, but where there may be reason to mislead, one is likely to suspect him. Here one plausible reason lies in the *Rosalind* story; if it has accomplished nothing else, the persistent ingenuity of scholars has made it evident that Spenser preferred her identity to remain generally unknown, and the addition of Menalcas to the cast of the little pastoral drama might, unless place references were concealed, have been sufficient to enable the reader to penetrate the disguise.⁸³ Manifestly, E. K.'s

⁸⁰ *The Defense of Poesy*, ed. Albert S. Cook (New York, 1890), pp. 26, 47.

⁸¹ Percy W. Long ("Spenser and the Bishop of Rochester," *loc. cit.*, pp. 713-18) casts doubt on the idea that Harvey was instrumental in Spenser's appointment as Young's secretary.

⁸² See Percy W. Long, "Spenser's Visit to the North of England," *M.L.N.*, XXXII (1917), 58-59.

⁸³ Dr. Leicester Bradner's identification (*loc. cit.*) of "St. Brigets Bowre" (*July*, l. 43) rests in part on the supposition that Spenser was unwilling that his place references be entirely clear. Consider also the apparently needless indefiniteness of E. K.'s note on l. 21 of *April*: "Seemeth hereby that Colin per-

evidence should not be deemed conclusive in identifying the event in the poet's life to which *June* refers; probably, unless they are supported by other information, his statements here should be disregarded.

The fact is that the other hints of the time of composition, though not numerous, point to the end rather than the beginning of Spenser's days at Bromley. The Rosalind episode was nearly, if not quite finished—though to judge from the tone and character of the allusions to her, it was a thing not long past—and the poet had assumed the name of Colin; both these events, as we shall see, probably occurred after he had begun his work with Young. On the other hand, there is no reason to think that *June* was written with the calendar scheme in mind; the season is summer, but nothing is said to date it more definitely. If it was not written for inclusion in the *Calender*, one might imagine that it was Spenser's reproof of Rosalind when he felt that she was turning too much of her attention to Menalcas. Under these circumstances, he might have heightened his natural disappointment to the despair evident in *June*; perhaps his prospective change of employment added a desirable touch of poignancy to the situation. Though the evidence of the date of *June* is not entirely clear, it fits the facts to place it shortly before his removal to London.

October was probably composed in London. It reveals no evidence of the ecclesiastical interests that seem to have occupied much of Spenser's attention during his work as secretary to Bishop Young; on the other hand, there is shown an interest in the Court which we are likely to associate with his days of flattering hope among Leicester's followers. Both here and in the second part of *April* are found ingratiating references to the Queen, and here her name is coupled with Leicester's in a way that surely was intended to be pleasing to him. Here, too, is to be found more than a hint of the idea that poetry was a means by which one might help his fortunes at Court. The style, which E. K. notices to be "more loftye then the rest," resembles that of those pieces whose composition we find reason to associate with Spenser's connection with Sidney and his uncle. In fact, one might

teyneth to some Southern noble man, and perhaps in Surrye or Kent"

Three eclogues—*April*, *June*, and *July*—which seem to have this type of disingenuous note, appear from various indications to be earlier pieces, written probably for a small audience and with no thought of publication, and later incorporated in the fabric of the *Calender*. In those written expressly for the *Calender*, Spenser revealed no more than he intended his larger circle of readers to understand; elsewhere he relied somewhat upon his annotator to conceal when reticence was desirable.

suspect that *October* was originally conceived, at about the same time as the second part of *April* or slightly earlier, as a delicate reminder to Leicester that all the young poet's hopes had not yet been fulfilled.

Certainly there is little reason to think that it was first planned as a part of the *Calendar*. The only evidence of the season is distinctly equivocal; line 3 may, as C. H. Herford interpreted it,³⁴ equally well refer to the time of day. Nor is the other unifying theme more definitely emphasized. The one possible allusion to Rosalind,³⁵ E. K. would have one understand to signify Beauty, rather than any one exemplar, and there seems little reason to doubt him; whenever fair opportunity offers, he is willing enough to drop provocative, though usually somewhat indefinite, hints about Rosalind. Although the discussion of Colin and his muse shows that the name was already associated with Spenser and that he had won something of a reputation as a poet, it does not show that he had been decided upon as the central figure of the *Shepherd's Calendar*. Had he been, one might expect to find him one of the speakers, for the subject is one which he could most properly discuss.³⁶ His appearance, if the theory just advanced of the purpose of *October* be accepted, was to bring Spenser and his hopes unmistakably of Leicester's mind. Finally, the discrepancies between the character of Piers in *May* and in *October* also go to show that the *Calendar* was not yet planned.

Manifestly, however, at some time during the period under discussion, Spenser must have conceived the plan of combining, according to two unifying ideas (the calendar scheme and the story of Colin, Rosalind, and Hobbinol), some eclogues he had at hand with others still to be composed; and the probability is strong that the foundation of *December*, Marot's *Eclogue au Roy*, supplied the idea of the use of the calendar. Comparison of the periods of the life of man to the seasons is not startlingly unusual,³⁷ and yet the presence of an imitation of a pastoral embodying that comparison in a series of eclogues bound together in part by a development of that comparison inclines one to believe that that pastoral prompted the idea of the series in the poet's mind. The inclination is strengthened when, as happens here, a con-

³⁴ *Op. cit.*, p. 172

³⁵ Lines 91 ff

³⁶ Renwick, *op. cit.*, p. 215

³⁷ The *Kalendar des Bergers* devotes a prologue to this comparison. Possibly it was the recollection of this as Spenser was working over *December* that suggested to him the name for the series of pastorals it was intended to close

siderable portion of the imitation does not reflect the imitator's situation. Spenser, at less than thirty, can scarcely be writing autobiography when he describes the autumn and winter of his life; yet he departs widely from Marot to do so. It is clear that he was carrying the comparison of the seasons with his own life to the conclusion he felt was made necessary by its use as a unifying theme of his work, and the closeness of his imitation of the early part of Marot's pastoral gives an almost unmistakable hint concerning the source of the idea.

The completeness of the summary of the Rosalind story, the fullness of the development of her and Colin's characters, the clear presentation of the Colin-Hobbinol situation—all show that the basic concepts of the *Shepherd's Calendar* had been developed by the time *December* was finished, particularly when one notices that Spenser deviates from his original to include much of this material which is essential to the dramatic situation upon which his work was founded. For instance, Marot's Robin becomes Colin, Colin's predominating interest in love and his discipleship under Tityrus are not in Marot; and, as Professor Herford remarked, "The close, with its unrelieved despair, departs altogether from [Marot's] vein of pleasurable anticipation."⁸⁸ For these reasons, it is justifiable to believe that the writing of *December* supplied the hint for the gathering together of the *Shepherd's Calendar* and that the imitation of Marot was made at about the same time as the development of the calendar concept.

The problem of dating *November* is not made less difficult by the fidelity with which parts of Marot's *Complaint de Madame Loyce de Savoye* are imitated and the uncertainty of the identities of Lobbin and Dido. If, as is widely accepted, they represent persons of Sidney's group, composition followed introduction to him and his associates. This idea is supported by the style of the piece, in which the flowers of rhetoric bloom so freely as to recall *January* and the ode in praise of Eliza in *April*. Likewise, that ode and the lament for Dido are similar in their complicated metrical forms. Furthermore, it seems clear that, when *November* was composed, Spenser had already planned the *Calendar*; otherwise there would have been little reason for the lines concerning the sun's position in Pisces and the rest of the seasonal setting, which seem to have been a part of the eclogue from the beginning and which present a scene quite in contrast to Marot's pleasant vale with its noisy brook and gentle breeze. As has already been suggested,

⁸⁸ *Op cit.*, p. 188.

November seems first to have been intended to occupy the February position; but that indicates merely that the plan was changed in one detail, not that the plan itself had not been matured. The same attempt to bring *November* into conformity with the unifying themes of the *Calender* is evident in the careful description of the state of Colin's mind and in the reference to Rosalind.³⁹

Finally, it appears that the composition of *January* should be assigned to about the same time as that of *November*; and, inasmuch as it shows neither signs of nor need for revision to make it conform to the plan of the *Calender*, the indications on which this conclusion is based seem the more reliable. The references to Rosalind, Colin, and Hobbinol, fundamental as they are to the very theme of the poem, show not only that Spenser had already adopted the name of Colin but also that the piece was written during or after the Rosalind affair; Colin's unhappiness may indicate that it was over. That the infatuation was rather far in the past when the "Argument" was written can be gathered from the precision of the phrase "newly (*as seemeth*) enamoured of a countrie lasse called Rosalinde"; certainly there is nothing in the plan of the *Calender* to account for so carefully exact a locution. "A shepheardes boye" alludes to Spenser's employment with Young, and the rest of the line "(no better doe him call)" may have resulted from the poet's consciousness that, now that he had left Young and joined Leicester's circle, there was reason for his friends to feel that he had made a forward step. In the opening line he accordingly explains that, even though the pastoral guise was no longer so suitable as it had been, he judged it more decorous to appear to his readers not as the follower of Leicester but as the simple helper of Bishop Young. Furthermore, the complete suitability of the piece to the time sequence of the *Calender* suggests composition after the calendar motive was conceived.⁴⁰ Finally, the ornate rhetoric, with a "pretty Epanorthosis . . . and withall a Paronomasia" introduced here and there, helps to place *January* with the group of others which, as we have seen, appear to have followed Spenser's removal to London; the style is precisely what we might expect

³⁹ Marot, however, supplies a hint here

⁴⁰ The use of the same stanza here and in *December* has been explained as a device to secure artistic unity (see W. L. Renwick's edition of the *Shepheardes Calender*, p. 227); this explanation strengthens the view that the two eclogues were composed for inclusion in the *Calender* and at about the same time, as does the likeness of idea of *January*, 19-42, to *December* C H Herford (p. 92 of his edition) likewise alludes to the similarities of these poems "in motive, tone, style, and metre."

to result from the influence of the more cosmopolitan interests of Spenser's new environment.

On the basis of the information now collected, we can with a fair assurance of accuracy survey a large part of Spenser's literary occupation between his graduation from Cambridge in June, 1576, and the publication of the *Shepheardes Calender*.

The first contribution of the *Calender* to our knowledge of Spenser's activities comes, however, with the early months of 1578, when he undertook his duties with the new Bishop of Rochester, for none of the eclogues appears surely to have been written before that time. *March* may, it is true, be a college piece or slightly later, but only negative evidence supports the idea. The most that can be said is that it is the only part of the *Calender* that does not show signs of later composition. Nor are there visible effects of either the northern journey or a visit to Ireland. The former event, if it took place, influenced only the vocabulary employed; and the presence of words characteristic of the northern counties has been explained in other ways than as a result of this visit. So far as the *Shepheardes Calender* is concerned, this early period remains a blank.

Results of the association with Young and his ecclesiastical affairs, however, appear in at least *May*, *July*, and *September* and probably *February*. All these, and especially the first three, show peculiar similarities which mark them conclusively as of that period. Therefore, April 1, 1578, the probable beginning of Spenser's work with Young, may be set as an anterior limit of their composition; and the latest date would be the end of his residence at Bromley, about December 20 of the same year.

None of the pieces mentioned contains a reference to Colin that is integral to it; only in *September* is he mentioned at all, and there the lines may be thought an interpolation. From this fact, it is possible to explain Spenser's assumption of the name, for which no satisfying explanation has been offered. It fits the facts to believe that he began to sign himself Colin Clout at about this time and that these ecclesiastical eclogues played a part in his doing so. Inasmuch as the name is derived from Skelton's *Colin Clout*, it is reasonable to conjecture either that Spenser so signed these pastorals, critical of the religious conditions of the time, in allusion to Skelton's work, or else—and this seems slightly less likely—that some of his associates, recognizing a similarity, half

seriously bestowed the nickname upon him.⁴¹ In either case, an appreciative reception of these pieces would probably have led Spenser to adopt the name as a more permanent *nom de plume*. Furthermore, if Spenser were writing with Skelton's example in his mind's eye, it is easier to account for some of the peculiarities of language and meter in this group of eclogues.

If Spenser adopted his pseudonym while he was at Bromley, it is logical to place the wooing of Rosalind, or at least the poems recounting the courtship, at this time or subsequent to it; for her lover always bears the name of Colin. Probably most of the poems in which it is detailed are coincident with the affair itself⁴²; it is otherwise difficult to find a satisfactory motive for the writing of some of them, the first part of *April*, for example, which clearly was not conceived as a part of the *Calender*. Only the supposition that Spenser met and wooed Rosalind while he was at Bromley harmonizes the available evidence and makes possible a well-integrated story of these years of Spenser's life. Contrary ideas depend entirely upon E. K.'s statements and upon traditions which may very easily have grown from them; as E. K.'s remarks are sometimes susceptible to various interpretations and as their candor is not always above suspicion, they surely should not be relied upon to the extent of blinding us to other possibilities.

Next, the first part of *April* and perhaps that of *August* may be assigned to the later days of the episcopal secretaryship. As there is no sign of the poet's interest in the affairs and persons of the Court, they probably antedate his connection with Leicester. Slightly later, but still within this period, *June* may, with some probability, be placed. It pictures the pastoral love incident as having about reached its close and shows that the poet was looking forward to the next step in his career; but there is lacking any unmistakable indication that that step had been taken, for in both style and subject matter there is little in any of these three pieces to remind one of Spenser's days under Sidney's influence. The composition of the sestina of *August* may be placed near that of *June*, either at the end of the Bromley period or early in the London days.

⁴¹ The number of editions of Skelton's work listed in the *Short Title Catalogue* testifies sufficiently to his popularity at this time to justify the thought that Spenser may have been influenced at least so much by his works.

⁴² A close interpretation of certain lines of the *August* sestina suggests that during much of their association they were members of the same household; but this possibly should not be insisted upon.

Thus, when Spenser arrived in London about the beginning of 1759, his reputation as a pastoral poet had considerable foundation in work already done, his pseudonym of Colin Clout was already well established, and the Rosalind episode was a thing of the past, but probably recent enough to be a part of his immediate consciousness. Moreover, the writing of the *Shepherd's Calendar* was well advanced, although there is no indication that the plan of the work had as yet been formulated. He had by him *February*, *May*, *July*, *September*, and perhaps *March* in much the form in which they now appear; it is likely that *June*, the first part of *August*—and perhaps the *sestina*—and a part of *April* also went with him from Bromley to London.

Though *October* and the second part of *April* may possibly have been written at the very end of Spenser's residence with Young, it is much more probable that they, as well as Colin's lament in *August*, followed his establishment in London. They show further ventures in technique, some resultant increase in technical power, the influence of new literary masters, an increase in the poet's circle of friends and interests, and a growing desire for worldly advancement. This new tone is too pronounced to have come from the mere anticipation of a change in environment; it seems almost certainly to have resulted from the excitement of the change itself. From *October*, especially, it is clear that Spenser was thinking with concentration of the purposes and place of poetry in the larger world and particularly of the uses to which it might be put at Elizabeth's court.

This direction of thought forms a natural prelude to the origin of the idea of the *Shepherd's Calendar*, in which for the first time Spenser tried, in any large way, to make his muse serve him in a practical manner. At any rate, the concept of the *Calendar* seems to have come to him at about this time and to have been in some way closely connected with the writing of *December*. Whether this connection was one of cause or result, once the concept was matured and *December* imitated from Marot, the *Shepherd's Calendar* was well along toward completion. Of the twelve pastorals, only *November* and *January* remained to be written. This work was probably done rather soon, if stylistic and other internal evidence is to be depended upon; besides, the period between his removal to London and April 10, 1579, when the *Calendar—Glosse* and all—was complete in very nearly its present form, does not admit of long intervals between pieces. In fact, it would

appear that Spenser's work on the completion and unification of the poem must have been fairly concentrated.

During this time, too, must have come the bulk of the revision of those materials already at hand which needed it. To judge by the traces that have been left, little revision was necessary. The two parts of *April* must have been reworked and combined, *November* shifted to its present position after having been prepared as a February poem, *February* substituted to fill the gap thus created, a touch of month color added to *July*, and a reference to Colin inserted in *September*; then the *Calender* was ready for the attentions of E. K. His work was finished by April 10; and thereafter it is likely that Spenser laid aside the *Calender*, being "minded for a while to have intermitted the uttering of [his] writings." But when, about the middle of October, he changed his mind, the passage of several months had made necessary but few alterations. He revised *August*, adding the sestet, and omitted a passage from *September*. These are the only final revisions of which the poem bears traces; when they were made, it was ready for the printer and doubtless was soon delivered to him.

Judging from the evidence afforded by the poem itself, the only evidence available, it was by this process that the *Shepheardes Calender* was made. Because of the character of the evidence, the paucity of it at times, and occasionally its equivocal nature, it would be unwise to insist on some of the details, however, as here outlined, the hypothesis is a consistent and probable one, and by it are explained the peculiarities of the poem in a simple, natural fashion.

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VAUDEVILLE ON THE LONDON STAGE, 1700-1737 <i>Emmett L. Avery</i>	- - -	65
A STUDY OF CERTAIN REACTIONS OF THE APPLE TO SOIL, MOISTURE AND METEOROLOGICAL CONDITIONS: <i>Lawrence Leonard Claypool</i>	- -	78
DECOMPOSITION POTENTIALS OF FUSED SALTS <i>Roy C. Kirk</i>	- - -	79
STUDIES IN THE DROUGHT RESISTANCE OF THE SUNFLOWER AND THE POTATO: <i>Harry F. Clements</i>	- - - - -	81
FUNGI WHICH CAUSE DECAY OF APPLES IN COLD STORAGE: <i>Geo. D. Ruehle</i>	-	99
PHYSIOLOGICAL AND GENETICAL STUDIES ON DELAYED GERMINATION IN <i>Avena</i> . <i>LeRoy P. V. Johnson</i>	- - - - -	101
BIOLOGY AND CONTROL OF THE DOUGLAS-FIR BEETLE <i>Dendroctonus</i> <i>Pseudotsugae</i> HOPKINS (COLEOPTERA - SCOLYTIDAE) WITH NOTES ON ASSOCIATED INSECTS. <i>William Delles Bedard</i>	- - - - -	103
SUPPLEMENT—A SHORT-TITLE CATALOGUE OF ENGLISH BOOKS PRIOR TO 1700 IN THE LIBRARY OF THE STATE COLLEGE OF WASHINGTON. <i>Don Cameron Allen</i>	- - - - -	107

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VAUDEVILLE ON THE LONDON STAGE, 1700-1737

EMMETT L. AVERY

Instructor in English

That the audiences of the London theatres in the first third of the eighteenth century certainly witnessed and evidently enjoyed what might be called "variety entertainment" will not be surprising to anyone who has read several years of theatrical advertisements or playbills for that period. Merely to name the major types of plays and operas provided in the theatres is to show the range of entertainment offered as the main attraction of the evening's performance. More in the vein of "variety bills" was the wide range of supplemental entertainment intended to provide some degree of the novel or the familiar for the audience in the intervals between the acts or at the end of the play. That some of these supplemental entertainments—pantomime, for example—proved at times to be the attraction and overshadowed the play suggests the standards of taste among the theatregoers.

Possibly only a year-by-year survey of the advertisements or playbills would adequately demonstrate the variety and quantity of entertainments offered, yet it is possible to outline and illustrate the major types. Elsewhere I have discussed two of the entertainments: pantomime and dancing.¹ In the present paper I shall discuss two other groups: (1) the exhibition of physical novelties (posturers, strong men, tall men, imitators) and (2) short musical offerings. Of these, the presentation of the first occurred only occasionally; the addition of musical numbers as entr'acte pieces was a fairly steady practice throughout the period under consideration.

Of minor interest are the presentations of unusual epilogues; they apparently aroused little protest from those who felt that entertainments outraged the honor of the stage, probably because epilogues were, even when unusual, within the normal province of theatrical

¹"Dancing and Pantomime on the English Stage," *Studies in Philology*, XXXI (1934), 417-52. Some of the contributions of foreign performers—chiefly French and Italian—to these kinds of entertainments I have discussed in a recent article in the *Philological Quarterly*, XVI (1937), 105-23.

offerings. Typical of the group was one given by Penkethman, the famed comedian, who, in Drury Lane on December 26, 1707, gave

. . . an Equi-Vocal Epilogue after the old English manner, Compiled and Spoken by the famous Signior Pinkethmano, upon an Ass that never appear'd but twice on either Stage¹

On the same night in the Queen's Theatre in the Haymarket Colley Cibber gave a humorous epilogue, advertised as "Compos'd and Perform'd by the famous Signior Cibberini, after the newest English, French, Dutch, and Italian manner."² Among the many other variations in the styles of epilogues was one in which Cibber represented the "Figure of Nobody"³; on April 4, 1709, Penkethman and Jubilee Dicky represented the "Figures of Some-Body and No-Body, Mr. Penkethman hoping himself to be Somebody that Night, (or No-Body) it being his Jubilee-Day."⁴ In the next season the comedian Pack spoke an epilogue in Drury Lane, May 23, 1710, in which he was to be "in a riding Habit, upon a Pad-Nagg representing a Town-Miss Travelling to Tunbridge."⁵ Much later the actor Harper had a short act which he gave frequently, his "mimicking a Drunken Man."⁶

But these epilogues were much less unusual than some of the novelties presented at other times. Early in the century there appeared the performer known as Clench, or Clynch, or Barnet, whose talent lay in imitating the sounds of instruments, men, and animals with his voice. To appeal to a prospective audience, he often specified in his advertisements what particular imitations he would present, as for his appearance in Drury Lane, June 18, 1703, when he was to

perform his Imitation of an Organ with 3 Voices, the Double Curtel, and the Bells, the Huntsman, with his Horn and Pack of Dogs, all which he performs

¹ *Daily Courant*, December 26, 1707. During this period one can find advertisements of similar entertainments at the fairs—Bartholomew, Southwark, or May Fair; in fact, many of the more novel "acts" suggest that what was popular at the fairs was likely to appear at some time in the theatres. For example, three years before the time of this epilogue Penkethman had had a booth at May-Fair in which "he speaks an Epilogue upon an Elephant between Nine and Ten Foot High, arrived from Guinca, led upon the Stage by six Blacks." (Quoted from the *Daily Courant*, April 27, 1704, by Alfred Jackson, "London Playhouses, 1700-1705," *Review of English Studies*, VIII [1932], 301)

² *Daily Courant*, December 26, 1707.

³ *Ibid.*, March 26, 1709.

⁴ *Ibid.*, April 4, 1709

⁵ *Daily Courant*, May 23, 1710.

⁶ *Daily Post*, May 3, 1720; this was advertised for the theatre in Lincoln's Inn Fields.

with his Mouth on the open Stage, being what no Man besides himself can ever yet attain to.⁹

Imitators evidently bred imitators, for on May 26, 1710, Layfield, performing in Drury Lane, advertised an imitation of Clench; Layfield was to "Imitate the Horn, Huntsman, and Pack of Hounds, all perform'd by his natural Voice."¹⁰

Even less conducive of the dignity of the stage were the posturers and acrobatic performers. In the first decade of the century there came to Drury Lane an acrobat named Evans, who, it was advertised, had just arrived from Vienna and whose accomplishments were given in some detail for the performance of April 27, 1703, he was to

Vault on the manag'd Horse, where he lyes with his Body extended on one Hand in which posture he drinks several Glasses of Wine with the other, and from that throws himself a Sommerset over the Horses' Head, to Admiration.¹¹

Moving to Dorset Garden for a performance on April 30, 1703, he was on the same bill with two rope-dancers, two French girls who

will perform several Dances on the Rope on the Stage, being improv'd to that Degree, far exceeding all others in that Art¹²

In the next year, on June 5, 1704, Drury Lane offered a performer on the ladder, whose exploits were related in the day's advertisement:

... first he stands on the top-round with a Bottle in one Hand and a Glass in the other, and drinks a Health, then plays several Tunes on the Violin; with fifteen other surprising performances which no other man but himself can do¹³

Although most of these performances were not for extended runs, in 1709 a posturer appeared in the Queen's Theatre in the Haymarket for the better part of a month. He was advertised on his opening night, December 7, in terms apparently calculated to appeal to the curiosity of his prospective audience:

⁹ *Daily Courant*, June 18, 1703. Clench also illustrated the link between the theatres and such outside entertainments as the fairs and booths. On occasion he, like many others, set up his own establishment in competition with the theatres; in the *Daily Courant*, November 28, 29, 30, 1704, he advertised his own place of entertainment with an added feature: "Dancing on the Ladder by Mr Harvey, the only Artist in the World, and Vaulting on the Horse." Clench also competed with the theatres early in 1712.

¹⁰ *Daily Courant*, May 26, 1710.

¹¹ *Daily Courant*, April 23, 1703.

¹² *Ibid.*, April 29, 1703.

¹³ *Ibid.*, June 5, 1704.

With several surprizing Performances on the Stage by the famous Mr. Higgins, lately arrived from Holland; who turns himself in such variety of Amazing Shapes and Figures, that the particulars wou'd be incredible to all Persons who have not seen him¹⁵

Higgins had at least one auditor who set down his impressions. The Tatler went to the theatre, and, noting the audience "hushed in a very deep Attention," expected to see Betterton appear in a tragedy; instead to my unspeakable Amazement, there came up a Monster with a Face between his Feet; and as I was looking on, he raised himself on one Leg in such a perpendicular Posture, that the other grew in a direct Line above his Head. It afterwards twisted it self into the Motions and Wreathings of several different Animals, and after great Variety of Shapes and Transformations went off the Stage in the Figure of an humane Creature. The Admiration, the Applause, the Satisfaction of the Audience, during this strange Entertainment, is not to be expressed. I was very much out of Countenance for my dear Countrymen, and looked about with some Apprehension, for fear any Foreigner should be present.¹⁶

In the following summer, when Penkethman conducted his summer theatre at Greenwich, he offered a number of special attractions. On August 17 the following was advertised:

1st A young Gentlewoman, who never appear'd on a publick Stage, turns around upon one Foot 300 times, and as she is turning fixes twelve Swords points about her, 2 to her Eyes, 2 to her Eye-lashes, 2 to her Eye-brows, 2 to her Nose, 2 to her Lips, and 2 to her Breasts, etc¹⁷

After she had performed on several days, Penkethman on August 26 added: "a famous Master who never appear'd on the Publick Stage Vaults the Manag'd Horse." On September 7 he had another new "act" to offer:

. . . a little Girl of 4 Years of Age, that Dances the Stiff Rope and Vaults the Slack Rope beyond Imagination

Sometimes the special attraction had no unusual ability to exhibit, for very tall men and women were occasionally exhibited. In the early part of 1734, Drury Lane enlivened one of its pantomimes by placing in it a tall man called Mynheer Cajanus,¹⁸ upon whom the *Universal Spectator* commented:

¹⁵ *Ibid*, December 7, 1709. He continued there during most of December, and on February 10, 1710, announced that he too had set up his own establishment to entertain the public.

¹⁶ *The Tatler*, No. 108, December 17, 1709.

¹⁷ *Daily Courant*, August 17, 1710.

¹⁸ The Earl of Egmont attended one performance at which Cajanus was presented and said that he "was shown the tallest man of all that I have seen. He

Since Mons. Harlequin has conjur'd up his Guaragantua at *Drury-Lane*, the Town has flock'd to that *Theatre* they just before *deserted*, and with Wonder beheld *Mynheer Cajanus* stalk round the Stage with a becoming Dignity The Gentleman who has lately succeeded to the Propriety and Management of that *Theatre*, seems to understand the present Gout When the *tall man's* Time which is contracted for, is expir'd, 'tis said, his Part is to be supplied by a *fat man* of *Islington*, when *Custards* and *Pokers* are to be demolish'd in great Numbers for the *Edification* of his Majesty's liege Subjects."

This writer's guess was only slightly wrong, for apparently Cajanus was succeeded late in the winter by Signora Garagantua,¹⁸ advertised as Mrs. Webb, the Tall Woman from Leicestershire.¹⁹ In the meantime the New Theatre in the Haymarket had joined in the exhibition of human spectacles. This time the attraction was a strong man,²⁰ concerning whom the Earl of Egmont made a lengthy entry in his diary:

After dinner I went to the Haymarket playhouse, where among other representations I saw the strong man show one of his feats Two chairs were placed on the stage at such a distance as that laying himself along, his head and a small part of his shoulders rested upon one, and his feat on the other, so that his body and legs were suspended in the air Then six grown men (two of whom I observed to be remarkably tall) go up and stood perpendicular upon his body, two on his chest, two on his body, and two on his legs. He bore them all a quarter of a minute, and bending his body downward till it almost touched the ground between the chairs, with a surprising spring and force raised his body with all that weight upon it, not only level

is seven foot ten inches and a half in height, a German by birth." (*The Diary of Viscount Percival, afterwards First Earl of Egmont* [London: Historical Manuscripts Commission, 1920-23], II, 33)

¹⁸ February 23, 1734, as quoted in *Gentleman's Magazine*, IV (1734), 92.

¹⁹ The *Grub Street Journal*, quick to satirize any foibles, theatrical or otherwise, quoted the following item from the *Daily Journal* and added its own sarcastic comment "We hear from Nottingham, of a young woman living seven miles from thence, who is above seven foot tall, and proportionably large, tho' but 24 years old *DJ*—*She would make a good actress, in conjunction with Mynheer Camus, for the support of our Theatres*" (April 18, 1734).

²⁰ *London Daily Post and General Advertiser*, December 24, 1734

²¹ Over three decades before, another strong man had made a sensation in the theatre in Dorset Garden In characteristic fashion Tom Brown told of him "The strong *Kentish Man* (of whom you have heard so many stories) has, as I told you above, taken up his Quarters in *Dorset Garden*, and how they'll get him out again the Lord knows, for he threatens to thrash all the Poets if they pretend to disturb him." (Tom Brown, *Works*, 4th ed. [1715], I, 217) An item in the *Post Man*, November 25-28, 1699, suggests that he was to have competition in his own field "The Strong Man who has made so much Noise in Town, and who performed several things before the King with extraordinary strength, showed many feats on Saturday at Dorset Garden, but there is another Sampson come out of Derbyshire, who pretends to out do the Kentish"

as he lay at first, but higher in the air. The mob of the gallery not satisfied with this, hissed, whereupon he refused to show any other of his tricks."²²

Still other varieties of unusual performances appear on the theatrical programs. Drury Lane, on April 25, 1732, gave what it entitled a "Lapland Entertainment call'd Aesop's Concert of Animals," a performance in which the actors presumably were dressed to represent animals. There were violins to be played by three cats, a hautboy by a dog, a harp by a donkey, a bassoon by a bear, a French horn by a stag, with singing in Welsh by a goat and the Music Master represented by Aesop.²³ Apparently real animals were exhibited on the stages at least once. In January, 1717, a German named Swartz is supposed to have brought to London two dogs which had been taught to do two dances, the loure and the minuet. Rich is said to have engaged them for Lincoln's Inn Fields for ten pounds a night, and they brought twenty full houses to the detriment of plays at the other houses.²⁴

Although the managers of the theatres apparently were willing, perhaps even eager, to present novelty, acts such as those discussed above were never during this period a regular part of the evening's offerings.²⁵

²² *Diary*, March 2, 1734; II, 40. Interested in this temperamental performer, the Earl added some details of his history. "This man is about thirty years old and married. He was born in a neighbouring village and by trade a carpenter. His father was 70 years old, and his mother 52 when they begot him. When 13 years of age he beat at boxing boys of 19. He is very fond of music and goes a note lower than Montagnana, the deep voiced Italian now here, wherefore he is now learning to sing. He will bend a kitchen poker round his neck like a withy, or break it by a blow on his arm. He formerly ran vastly swift, till resisting the draught of three cart horses, they by a sudden jerk pulled him over, by which accident he broke his thigh."

²³ *Daily Post*, April 25, 1732. This entertainment gave the *Grub Street Journal* (April 27, 1732) an opportunity to satirize Colley Cibber once more. "The Curious, perhaps, may desire to know what Players performed these extraordinary Characters. Be it known then, that the parts were *marvelously topp'd* by the following persons, in *which they out-did their usual Out-doings*."

The Three Cats by three vertuous Actresses

The Dog by every Manager in his Turn

The Bear by Father K—B—R

The Monkey by the Son, *bare-fac'd*

The Stag by ditto, with a most illustrious frontispiece

The part of the *Goat* and the *Welsh Song* performed and written by the *Lapland Laureat*, and designed as a compliment to the Welsh Nation."

²⁴ Percy Fitzgerald, *A New History of the English Stage* (London, 1882), I, 421.

²⁵ The entertainments which have been discussed above were given as adjuncts to the evening's play, but occasionally one of the legitimate theatres forsook plays and presented only variety entertainment in competition with plays at the other houses. In 1726 and 1727, for example, Lincoln's Inn Fields was occupied by a troupe of acrobats and rope-dancers, which was headed by Mrs. Violante

Musical entertainments, however, formed a much more considerable portion of the evening's bill. There were, of course, Italian operas and ballad operas as well as revivals of the dramatic operas of the preceding century. In addition, many short musical pieces, such as vocal and instrumental solos and duets, continued to be popular and were, as earlier, introduced not only into plays but also between the acts or at the end of the play. Perhaps the general nature of these supplementary musical numbers can be briefly illustrated by stating the entr-acte entertainments for a not unusual performance. On June 3, 1735, the theatre in Drury Lane presented *The Relapse* followed by *An Old Man Taught Wisdom*. Two plays were not enough. A group of three musical numbers was added: A Concerto for a Hautboy; Third Concerto of First Opera of Geminiani; Handel's Overture to *Ariadne*. Between the acts of the play were additional entertainments. At the end of Act I was given a "Drunken Peasant" (mimic dance) by LeBrun. After Act II Villeneuve and Mrs. Walter gave a dance known as the English Maggot. Between Acts III and IV was danced the "Black Joke" by Nivelon and Miss Mann. After Act IV Roberts sang a "Mock Italian-English Ballad." At the end of the play another dance, "The Amorous Swain," was given, and Cibber gave an Epilogue on an Ass²⁵. In those supplementary entertainments, as can easily be seen, was something to suit every taste.

For the musical entertainments between the acts songs were most frequently used. Since they were short, they did not delay the progress of the play unduly; rather they filled pleasantly the interval between scenes. Naturally, some of them were new, some old. Many were taken from plays or dramatic operas which had proved popular or from well-known ballads, and time and again popular singers re-appeared to entertain. For example, songs from Purcell's operas were often given: the "Mad Song" in *Don Quixote* beginning "Let the Dreadful Engines"²⁶ (sung by Leveridge in Drury Lane, December 19, 1702), and,

(sometimes Violenta) and which presented such spectacles as the following
 several Entertainments of Rope Dancing by herself Particularly the Displaying of two Flags on the Tite Rope, as also walking up aright forwards and backwards on the Rope, the lower End fixed on the Stage and the upper End fixed to the Footmens Gallery, and a Girl of five Years of Age will also dance a Minuet on the Rope as properly as on the Floor A tumbler will also perform the most surprising Actions that ever were seen" (*Daily Courant*, June 1, 1726)

²⁵ *London Daily Post and General Advertiser*, June 3, 1735.

²⁶ *Don Quixote*, Part I, Act IV, scene i; Purcell's *Works* (1906), XVI, xxlii.

from the same opera, "The Genius of England"²⁷ (again sung by Leveridge, Drury Lane, June 19, 1703).

Of the singers, Richard Leveridge may well serve as a representative. One of the most popular, he sang on the stage for many years. He had a deep and powerful bass voice, and was known not only as a singer but also as a composer. Early in his career he combined both his talents, singing in Drury Lane in 1699 in *The Island Princess*, the music of which was composed by Daniel Purcell, Jeremiah Clark, and Leveridge himself.²⁸ As Burney adds, after the beginning of the eighteenth century

there was "singing by Mr Leveridge," announced in almost every advertisement for that theatre, till operas on the Italian plan were attempted, where he had a part assigned to him in each as long as English was allowed to be sung in them.

In addition, he sang a great deal between the acts. Some of these songs were of his own composing, such as "The Merry Cocker's Tragical End at Last," popular around 1728²⁹; "The Play of Love," written by himself and sung on March 18, 1725³⁰; "The Tipling Philosophers"; "Both Teazers"; and the more famous "The Roast Beef of Old England" (sung by him in Covent Garden, for example, on May 1, 1735), the first stanza of which is very much like that of the song of the same name in Fielding's *Don Quixote in England*.³¹

There were many others like Leveridge who sang in the theatres year after year and who represented the constant and familiar performers to be found in any age. But, as with almost all the other forms of entertainment, singing frequently was presented in such fashion as to emphasize some novel aspect of the soloist or his song. Even as the first appearance of an actor was likely to be noted in the bills, so the fact that the singer had never appeared before was nearly always stressed; the

²⁷ *Ibid.*, Part II, Act V, scene ii; *Works*, XVI, xxviii

²⁸ Charles Burney, *A General History of Music* (London, 1789), IV, 215.

²⁹ Printed in *The Musical Miscellany* (London, 1729), II, 170-1. An inspection of the contents of the six volumes of this collection will give a suggestion of the share Leveridge had in the popular music of his day as well as of the type of verse popular on the stage. He also published a volume of his own songs: *A Collection of Songs* (London, 1727). A list of many other popular songs of Queen Anne's reign is given in a concert bill for an evening's entertainment which was to include not only songs but also dances and dialogues; see James Graves, "An Early Concert Bill," *Notes and Queries*, First Series, XI (May 19, 1855), 281-82.

³⁰ In *The Musical Miscellany*, II, 8-9.

³¹ Both songs were printed in W. Chappel's *Popular Music of the Olden Time* (London, 1859), 636-37.

youthfulness of the performer might also receive special attention. Lincoln's Inn Fields, for example, advertised on February 12, 1715, singing by a girl who had never appeared on the stage before, and on March 3 singing by a boy who had never appeared on any stage. If the singer was received well, he was likely to be named in a later advertisement; Lincoln's Inn Fields announced on February 26, 1715, singing by a gentleman who had never performed before and on February 28 advertised him again, giving his name, Rawlins. If a youthful performer was named in the bills, it was likely to be because he was the pupil of some person of prominence, as was young Master Osborne, who was called a "Scholar" of Henry Carey and who sang "Was Ever Nymph like Rosamond" from the opera *Rosamond*.⁸³

Likewise, Italian songs had a considerable vogue at times. Before the Italian opera had made its appearance in England, Italian songs and singers had already had a share in stage entertainments. Presented occasionally in the last decade of the seventeenth century,⁸⁴ they were frequently advertised before 1705, when Italian operas had their first vogue in London. Early examples of Italian singing are the appearances of Signiora Joanna Maria (Drury Lane, February 1, 1703) and Signiora Francisca Margarita de l'Epine (Lincoln's Inn Fields, June 1, 1703; Drury Lane, January 29, 1704, and December 30, 1704). Even on the first performance of *Arsinoe*, January 16, 1705, the Italian opera was preceded and followed by singing in Italian and English by de l'Epine. The establishment of Italian opera in London did not greatly lessen the vogue for Italian songs in the regular theatres. In 1710 Holcomb frequently sang in Italian in the Queen's Theatre. In 1725, for example, several theatres offered Italian songs: in Lincoln's Inn Fields (April 12, 1725) Signior Rochetti sang; in Drury Lane (January 4, 1725) Mrs. Weekly; in Drury Lane (December 8, 1725) Mrs. Robinson. There was also some attempt to lend novelty by stressing the fact that a singer was for the first time attempting Italian songs, as Ramondon was advertised for the Queen's Theatre, July 26, 1710, "it being the first time of his singing Italian on the stage."⁸⁵

⁸³ New Theatre in the Haymarket, August 21, 1735 Richard Osborne, who was not only a pupil of Carey's but also his amanuensis, died in 1737 at the age of nineteen. Carey wrote a poem lamenting the boy's death, see F. T. Wood's *Poems of Carey* (London, 1930), pp. 192, 252.

⁸⁴ Allardyce Nicoll, *History of Early Eighteenth Century Drama* (Cambridge, 1925), p. 226n.

⁸⁵ *Daily Courant*, July 26, 1710. For other examples of Italian singing during

Dialogues, particularly those between a man and a woman, were also common. Once again Purcell's music was frequently performed: the "Dialogue of the Mad-Man and the Mad-Lady," taken from the *Richmond Heiress*²⁸ (sung by Leveridge and Mrs. Lindsey, Queen's Theatre, July 6, 1710); "Tell Me Why, My Charming Fair," from the masque at the end of *Dioclesian*²⁹ (sung by Mrs. Cross and Leveridge, Drury Lane, February 8, 1705); and "Since the Times Are So Bad."³⁰ Many of the dialogues were advertised merely as "comical dialogues" or with titles which suggest humor: "Dialogue between a Drunken Rake and a Town Miss" (by Rainton and Pack, August 5, 1712). Others were presumably amatory: "Dear Pretty Maid" (sung by Mr. Nicholls and Mrs. Mountfort, New Theatre in the Haymarket, February 11, 1729); "'Tis Sultry Weather, Pretty Maid" (by Hall and Mrs. Thurmond, Lincoln's Inn Fields, August 3, 1715); "John, E're You Leave Me" (Dogget and Leveridge, Queen's Theatre, July 6, 1710).

Still others of the musical numbers were solely instrumental, a type which was more popular in the early decades than in the later. These varied from solos on all kinds of instruments to orchestral music. During 1702, 1703, and 1704, for instance, Drury Lane very frequently advertised violin solos to be played by Signior Gasperini. There were also the "Extraordinary Entertainment of Instrumental Music, all of Flutes, to be perform'd by Mr. Paisible and others" (Drury Lane, October 20, 1702); "a new Entertainment of Musick performed by the whole Band, in which Mr. Paisible, Mr. Banister, and Mr. Latour play some extraordinary Parts upon the Flute, Violin, and Hautboy" (Drury Lane, April 19, 1703); and "three several New Entertainments of Musick perform'd in Consort by seven young men, (upon Hautboys, Flutes, and German Horns) lately brought over by their Master, the famous Godfrede Pepusch" (Lincoln's Inn Fields, April 4, 1704). As one might well expect, the "extraordinary" nature of many of the performances was emphasized; a number of performances in Lincoln's Inn Fields illustrate the variety of novelty. On May 10, 1727, the theatre offered a "Preamble beat on Kettle Drums by Mr. Job Baker of His Majesty's Second Troop of Horse Grenadier Guards." On Feb-

the late seventeenth and early eighteenth centuries, see Burney, *op cit*, IV, 193-7.

²⁸ Act II, scene ii; for the words and music, see Purcell's *Works* (1917), XXI, viii-x.

²⁹ *Ibid*, IX, xvi-xvii.

³⁰ From *Don Quixote*, Part II, Act V, scene ii; *Works*, XVI, xxvi-xxviii.

ruary 7, 1729, it presented music on the harpischord by Mr. Kentzen (from Germany), who was seven years old and had never appeared on a stage before. On January 16, 1729, it advertised a piece of music accompanied by Joachim Frederic Creta, "who will blow the First and Second Treble on Two French Horns, in the same Manner as if Two Persons." And on February 25, 1732, it gave a remarkable concert which was advertised as one first offered in Dresden. In it Colombine played a harp, Harlequin a violoncello, Scaramouch a bassoon, and Pierot a double bass horn; there was singing by Diana and an Indian king, with violins played by a Spaniard, a Roman, a Hungarian, a Persian Turk, a Polander, an Arabian, a Muscovite, a German Flute by a Satyr, and French horns by foresters. Altogether forty to fifty people were to take part.

Finally, among the musical entertainments were those which combined singing and instrumental music to form elaborate interludes or masques used as after-pieces to the play. Many of them combined the vocal and instrumental in a story which was frequently derived from the classics and which often involved a considerable display of scenery and machinery. In some respects, these musical pieces appealed to the same interest in spectacle which some seventeenth century dramatic operas and the eighteenth century pantomimes usually provided. Some of the elements of the type are illustrated in John Hughes' *Apollo and Daphne*, produced in Drury Lane, January 12, 1716, as an afterpiece to *The Tender Husband*. It had four parts: Apollo (sung by Margaritha), Daphne (by Mrs. Barbier), Peneus (by Turner), Doris (by Mrs. Willis). The plot concerns Daphne's vow to Diana, her pursuit by Apollo, and her final transformation into a tree; it is told in verse and songs. The opening of the masque emphasized the scenic effect which was an important part of many such pieces:

*The First SCENE is a River Peneus, a River-God, appears on a Bed of Rushes, leaning on his Urn. He rises, and comes forward, his Head Crown'd with Rushes and Flowers, a Reed in his Hand.*²⁰

Later, in the second scene, music and machinery combine in the descent of a heavenly deity:

A Symphony of Instruments is heard, whilst Apollo Descends in the Chariot of the Sun; a Crown of Bays about his Head and his Lyre in his Hand.

In fact, descents, decorations, and spectacle had become so much a part

²⁰ All references are to the edition of 1716.

of the appeal of productions other than plays proper that the author of *Presumptuous Love* (1716) almost apologizes for not having given more attention to these effects.

*I own here is a great deal of Room for fine Machinery, Decoration of the Stage, and the like; but as that wou'd have encreas'd the Expenses of the House too considerably, we hope the Musick to this Masque will pass as agreeable an Entertainment to the Town, as hath been produced in this Kind some Years*¹⁰

Nevertheless, considerable machinery, as well as music, is present. In Act II Jupiter, after some "soft Musick," descends "on an Eagle." Soon, after "A Symphony of Flutes," Juno "passes the Stage in a flying Chariot, drawn by Peacocks, and appears as behind a Cloud." Several scenes open to disclose new wonders, after one of which Juno vanishes and "Lightning succeeds Thunder" and infernal spirits rise and sink to the accompaniment of the chorus.

Such masques were not limited solely to classical themes, for often they introduced patriotic material or combined the classical myth with another story. Such probably was the *Nuptial Masque; or, Triumphs of Cupid and Hymen*, produced in Covent Garden on March 16, 1734. Although it apparently was not printed, the characters suggest the mixture of two elements: Cupid, Hymen, Priests of Hymen, Venus, Britannia, Liberty, Bridal Virgin, Zephyrs, Bridal Swains, Bridal Nymphs, Deities of Pleasure, an Amour, and Bridal Nymph. On another plane of entertainment was *The Amorous Sportsman; or, The Death of the Stag*, produced in Goodman's Fields on December 20, 1732; the characters included a sportsman and four followers, a "Jolly Huntsman" and four attendants, a nymph and her four attendants. Presumably more exotic in theme was a piece called *The Sultan*, produced in Lincoln's Inn Fields, December 3, 1726, with four characters: Sultan, Sultanness, Selima, and Bostangi. A specimen of these miscellaneous musical entertainments which is perhaps as typical as any has been preserved in *The Union of the Three Sister Arts*, given in Lincoln's Inn Fields, November 22, 1723, and revived in 1725. The three leading parts, each of which represented one of the three arts of music, poetry, and painting, were St. Cecilia (played by Mrs. Chambers), Homer (Leveridge), and Apelles (Legare). The first scene opened with a chorus which welcomed Cecilia as "the heavens open slowly in which is seen St Cecilia in her celestial chariot. She descends and sings." In Scene II Poetry (Homer) entered "in a large folding drapery, after the

¹⁰ The references are to the edition of 1716.

antient manner," and was welcomed by Cecilia. In the third scene the two greeted Apelles, who appeared "*dress'd in a more gay and lively manner.*" All three conversed and sang in praise of their respective arts, until "*CECILIA returns into her throne, which ascends by degrees.*" ⁴⁰

The examples of musical numbers given above are only a very few of those presented at one theatre or another in the first third of the eighteenth century. It is true that there were many performances—even some seasons—for which the advertisements list few or no entertainments and at which probably none was given; but it is also true that in many years—particularly when competition among the theatres was keen or when a taste for variety had been developed—entertainments such as the musical numbers and the exhibitions of novelties in addition to such theatrical enticements as dancing and pantomime were advertised in such numbers and such detail that their power as an attractive force for the audience seems undoubted. In the discussion of these entertainments emphasis has been put on the stress upon the novelty or the "extraordinary" nature of the offerings which is to be found in the bills or theatrical advertisements. Although many bills merely list a number of entertainments between the acts and after the play with no noticeable emphasis on novelty, it is apparent that the theatres were quick to capitalize upon the new or the remarkable, that they were adept in enticing an audience, not merely to witness a play but often to witness a spectacle far removed from the province of the legitimate drama. Such is the implication, at least, that one receives from the prominence of song and dance, acrobatics, and pantomime in the theatrical advertisements and from the protests and attacks upon them which expressed the feeling of critics that the legitimate theatre was being degraded and was catering to the less elevated sensibilities of the indiscriminating public.

⁴⁰ This piece was printed in *The Weekly Amusement*, Saturday, July 12, 1735, pp. 930-33.

A STUDY OF CERTAIN REACTIONS OF THE APPLE TO SOIL MOISTURE AND METEOROLOGICAL CONDITIONS¹

LAWRENCE LEONARD CLAYPOOL

Ten plots receiving irrigation water at various frequencies and quantities were studied relative to tree growth as measured by increase in trunk circumference, terminal growth, and leaf size; fruit growth as measured by increase in circumference; and leaf activity as measured by the relative daily stomatal movement. Fruit growth was computed as increase in volume, the fruit being considered as a sphere.

Detailed studies of the stomatal movement were made on Rome Beauty leaves and sufficient tests on Delicious and Winesaps to determine that their stomata behaved similarly to those of Rome Beauty. A new method of stomatal examination was used which proved very rapid and accurate.

The amount of available moisture in the soil was found to influence fruit growth and leaf activity, particularly on days when air temperatures were high and relative humidity low.

The results may be summarized as follows:

1. Fruit growth was influenced by the length of time the stomata remained open—probably because of the effect of stomatal closure in reducing carbon dioxide intake and to a lesser degree because of the effect of lack of turgidity, which accompanied stomatal closing in reducing the ability of the palisade cells to manufacture carbohydrates.

2. The daily movement of stomata was influenced by light, temperature, relative humidity, and air movement in descending order of importance when the soil moisture supply was adequate.

3. With the elapse of time following each irrigation up until the next irrigation, soil moisture became progressively more of a factor. As the amount of available soil moisture approached zero, it resulted in stomatal closure earlier each succeeding day, and finally completely nullified the effect of light.

4. Soil moisture between the wilting point and field capacity does not appear to be uniformly available to apple trees.

5. The closure of stomata undoubtedly tended to conserve moisture, but resulted in slowing up fruit growth.

¹Abstract of a dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Agriculture (Horticulture), State College of Washington (1935).

6. Stomata on leaves exposed to direct solar radiation open wider and remain open longer than stomata on leaves in the shade.

7. No night-opening of stomata on Rome Beauty apple leaves was found. This was even true when the stomata remained closed the previous day because of adverse conditions, whereas night conditions were favorable to opening.

8. The number of stomata per square millimeter ranged from 250 to 325.

9. The guard cells of stomata of the apple varieties studied contained no chloroplasts.

10. Apple leaves were apparently able to modify their external appearance under conditions favoring injury to their tissue, by an evident change to a whiter color, so that less radiant energy probably was absorbed by them, and hence little if any injury to the tissue resulted.

11. The amount of moisture in the soil apparently influenced air temperature and relative humidity above the soil in its effect on transpiration.

DECOMPOSITION POTENTIALS OF FUSED SALTS¹

ROY C. KIRK

PART I

THE DECOMPOSITION AND EQUILIBRIUM REACTION POTENTIALS OF FUSED POTASSIUM CHLORIDE

Existing discrepancies in the literature concerning the decomposition potential of fused KCl at 800° C., as determined at graphite electrodes, were clarified. Neumann's direct method value of 2.8 volts was verified as the decomposition potential.

By means of a revised direct method, the potential difference between the anode and cathode was found to increase with increasing anodic current density as applied through a second cathode. A maximum value of 3.37 volts was obtained with an anodic current density of 1.0 amp./cm.² This is rather close to the calculated equilibrium

¹ Abstract of a dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Chemistry, State College of Washington (1936). The three parts have been published in *Transactions of the Electrochemical Society* under the same titles—Part I in Vol. LXIX (1936), pp. 661-74; Part II (slightly condensed) in LXX (1936), 239-48; Part III in LXX, 231-37.

reaction potential and is in exact agreement with the results obtained by Cambi and Devoto by the commutator method. Neumann's value of 2.8 volts should, therefore, be called the decomposition potential and 3.37 the equilibrium reaction potential.

PART II

DETERMINATION OF DECOMPOSITION POTENTIALS OF FUSED SALTS: THE USE OF A MODIFIED DIRECT METHOD FOR SALTS OF ALKALI AND ALKALINE EARTH METALS

The depolarization encountered in the electrolysis at graphite electrodes of fused alkali and alkaline earth halides was investigated. In contrast with the conclusions of Cambi and Devoto, this depolarization was found to be cathodic rather than anodic. It also was learned that, for these salts, the use of a platinum (rather than a graphite) cathode eliminates certain errors in the Neumann direct method. Decomposition potential values for fifteen compounds of the alkali and alkaline earth metals are submitted.

PART III

THE DETERMINATION OF DECOMPOSITION POTENTIALS OF FUSED SALT MIXTURES CONTAINING TANTALUM OXIDE

Decomposition potentials for various fused mixtures of potassium chloride with tantalum oxide and potassium fluotantalate were determined. Decomposition potential data are presented for fourteen fused compounds, to each of which Ta_2O_5 was added. It is suggested that the determination of decomposition potentials by the direct method can be used to obtain information regarding the suitability of fused salts as solvents in electrodeposition.

STUDIES IN THE DROUGHT RESISTANCE OF THE SUNFLOWER AND THE POTATO¹

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Associate Professor of Botany

In a previous paper² the metabolic changes in the various organs of the soy bean were reported and correlated with the climatic factors which during the growing season of 1926 allowed for the maximum growth of the plants, whereas in 1927 a large deficiency of moisture markedly affected the growth and general metabolism of the plant. The soy bean, however, because of deep-seated protoplasmic changes was capable of adjusting itself to the unfavorable circumstances of drought and grew successfully, although at a somewhat reduced rate.

The sunflower (*Helianthus annuus*) and potato (*Solanum tuberosum*, Russet Rural) were studied along with the soy bean, and, as will be seen later, they were less successful in withstanding the drought. The sunflower, however, was more resistant than the potato. Its first response to the drought was similar to that of the soy bean in that it also wilted. But, unlike the soy bean, the sunflower was unable to adjust itself sufficiently to dispense with wilting as a response. At first it recovered at night, only to wilt again the next day. As the drought continued and became more intense, the older leaves remained wilted even at night and after a time died. At the end of the drought period only the leaves near the top of the plant remained. These, however, did not wilt. Thus the soy bean with its adaptive mechanism was able to retain all its leaves which after the adjustment no longer wilted, whereas the sunflower, incapable of this adaptation, met the situation by reducing in large measure its energy-absorbing area, thereby reducing water loss. If the roots are well developed, those leaves which remain receive a proportionally larger supply of water than would those in a moist season where essentially the same root system supplies water to a much larger leaf area.

The potato was unsuccessful in its reaction to the drought. It, too, wilted at first during the day and recovered at night. Later, it failed to recover at night and remained in this wilted condition permanently, finally drying completely.

¹ Contribution No. 59 from the Botany Department of the State College of Washington.

² Harry F. Clements, "Studies in the Drought Resistance of the Soy Bean," *Research Studies of the State College of Washington*, V (1937), 1-16.

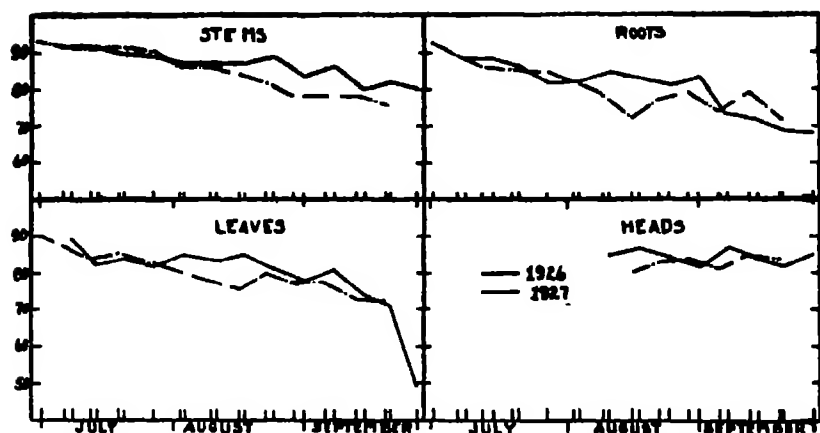


Plate II Moisture content of the various organs of the sunflower plant for 1926 and 1927 (Percentages of the green weight.)

tent of the various organs as the season advanced. Further, the organs of the plant for both years responded in a very similar manner with the exception of the intense drought period during August, 1927. At this time all of the plant organs were at a lower moisture level than during the same period of the previous year. As compared with the corresponding parts of the 1926 plants, the 1927 leaves during the drought period contained about ten per cent less water, the stems eight per cent less, the roots eleven per cent less, and the heads five per cent less. When rain fell in September, 1927, the various organs quickly reestablished normal moisture levels. These results compare favorably with those reported for the soy bean.

Carbohydrate Metabolism

The fluctuations of the various carbohydrate fractions are shown on Plate III. Starch and sucrose form so small a part of the metabolism of the stems, roots, and heads that they are not shown separately. The amounts of the sucrose are reported with the reducing sugars in all cases. The starch content of the leaves is reported separately, but that for the other organs is not reported.

Leaves

Whereas the soluble sugars of the leaves during the favorable year, 1926, maintain a low level, increasing from one per cent to three per cent as the leaves age, the 1927 leaves reach a very high level, particu-

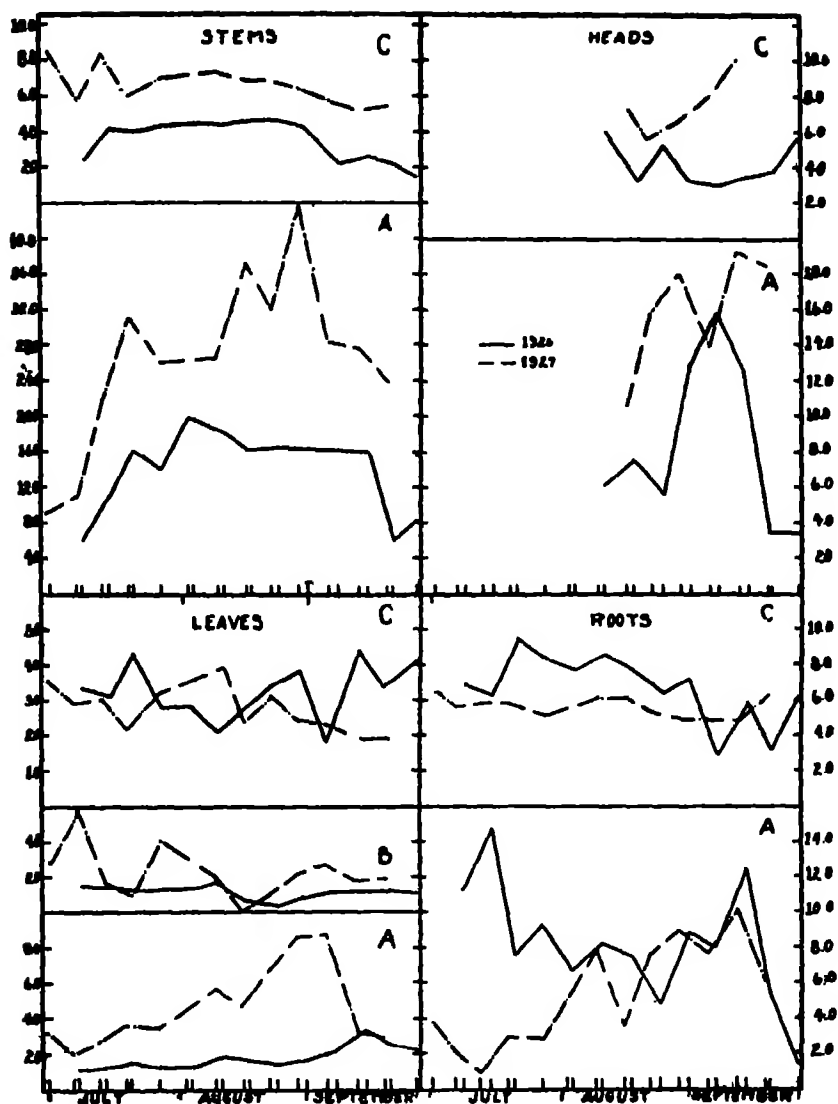


Plate III. Carbohydrate content of the various organs of the sunflower plant for 1926 and 1927 (Percentages of dry materials) Fig A: Simple sugars and sucrose. Fig. B. Starch. Fig C: Hemi-celluloses.

larly during the drought period, increasing from two to eight per cent. In fact, so far as the leaves are concerned, this is the outstanding response to the drought. The starch content was higher during 1927 than during 1926 and in this sense was similar to that of the soy bean. The quantity of hemi-celluloses, however, was not consistent. Certainly these materials do not take as important a part in the sunflower leaves as they do in the soy bean leaves. On the other hand, the soluble sugars seem to be much more important in the sunflower leaves than in the soy bean leaves.

Stems

The soluble sugar content of the rapidly growing sunflower stems is high. It increases as a temporary reserve in the pith and the other parenchymatous tissues of the stem from six to twenty per cent. These tissues seem to be the usual places of storage, as Leonard⁴ has shown. This level is maintained until late in the season, when it is reduced to eight per cent of the dry material. When the heads form, there is a steady movement of these materials into the permanent storage organ.

The soluble sugars during 1927 responded very early to the drought and reached enormous proportions during the drought month of August (forty-four per cent). As soon as the rains came in September, however, the sugar content of the stems dropped very rapidly.

The response of the soluble sugars of the sunflower stems was of the same kind as that seen in the soy bean stems, but of a much greater order. The hemi-celluloses of the sunflower stems were consistently higher during the dry year, but not so high as in the soy bean stems, even though during the favorable year they were almost equally abundant in the two plants.

Roots

The roots of the sunflower showed much the same carbohydrate responses as did those of the soy bean. The soluble sugars and hemi-celluloses were less abundant during the unfavorable year. Though these results are in accord with those shown by the soy bean roots, they are directly opposite to those shown by the other organs of the plant. As is the case with the soy bean, this indicates that the translocatory mechanism is less efficient under less favorable growing conditions. This is especially true since the leaves and stems in 1927 had much

⁴ Oliver A. Leonard, "Seasonal Study of Tissue Function and Organic Solute Movement in the Sunflower," *Plant Physiology*, XI (1936), 25-61.

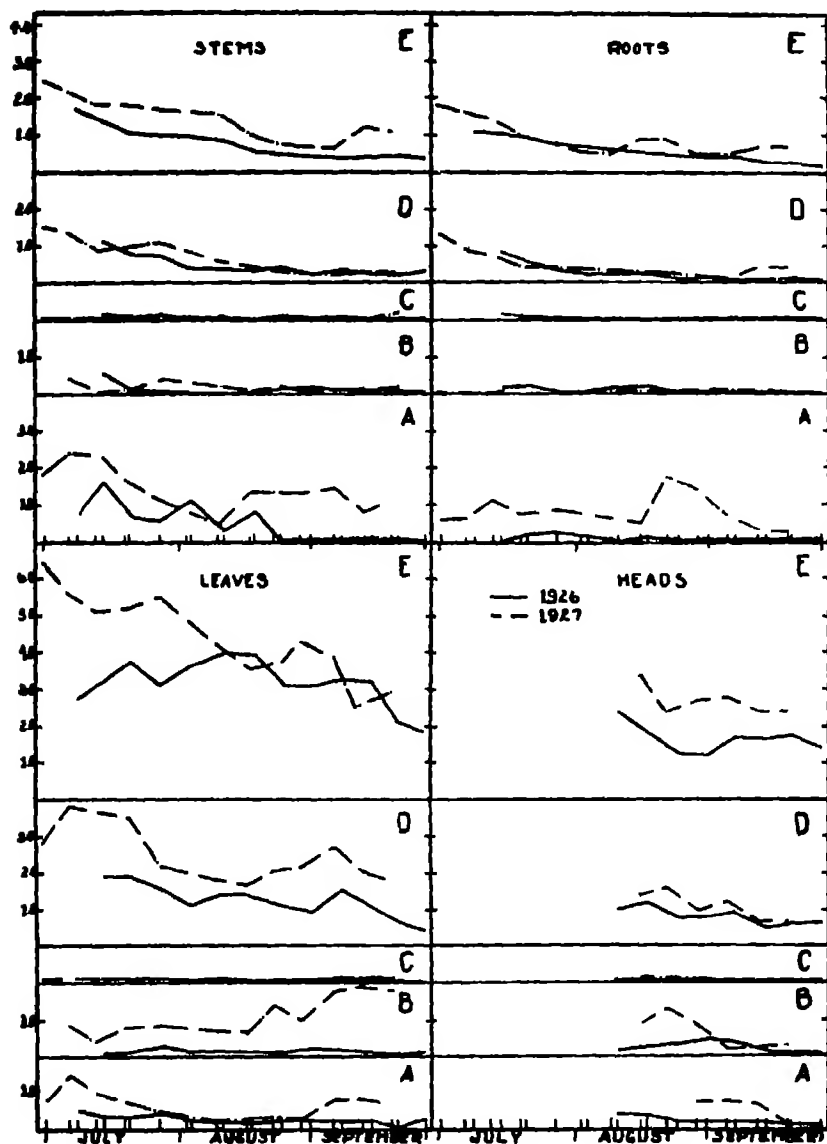


Plate IV. The nitrogen content of the various organs of the sunflower for 1926 and 1927. (Percentages of the dry materials.) Fig. A: Nitrate and ammonium nitrogen. Fig. B: alpha-amino acid nitrogen. Fig. C: phosphotungstic acid precipitate. Fig. D: total soluble organic nitrogen. Fig. E: total organic nitrogen.

greater amounts of soluble sugars than did those of the previous year. The same general sluggishness observed in the soy bean seems also to prevail in the drought-resisting sunflower.

Heads

The soluble sugar content of the sunflower head in 1926 rose rapidly from a low to a very high level until the transfer to fat and oil took place. Following this there was a sharp drop in the sugar content. In 1927, however, as with the soy bean, the sugar content rose rapidly and remained at a very high level—an indication that drought interferes with the conversion of carbohydrates to fats, despite the fact that this process is essentially one of dehydration. It is possible that this accumulation of sugar is taking place largely in the receptacle and not the fruit.

Nitrogen Metabolism

The amounts of the various nitrogen fractions for the several organs of the sunflower are shown on Plate IV. These results are so similar to those already described for the soy bean that a detailed description will not be given. It will suffice to point out again that, contrary to expectation, the various fractions are more abundant during the drought year than during the favorable year. This is especially true of the amino acid content of the leaves and the nitrate content of all the organs.

POTATO

The Growth of the Plants

The potato plants grew well during the 1926 season and started fairly well during 1927, although the seasonal deficiency of rain affected the growth of the plants early in July. (Plate V). The 1926 plants grew vigorously and began to mature late in August, whereas those in 1927 did poorly during late July and August. During this period the plants wilted and never seemed capable of adapting themselves to the adversity. The older leaves wilted and then dried. Though the stems remained green and succulent, they were short and carried small groups of leaves until late August. By the time the rains fell in September, the plants were dead. The leaves of the 1927 plants reached about fifty-two per cent of the weight of the 1926 leaves, the stems about fifty-seven per cent, the roots seventy-five per cent, and the tubers, sixty-seven per cent. This comparatively large growth of the tubers is

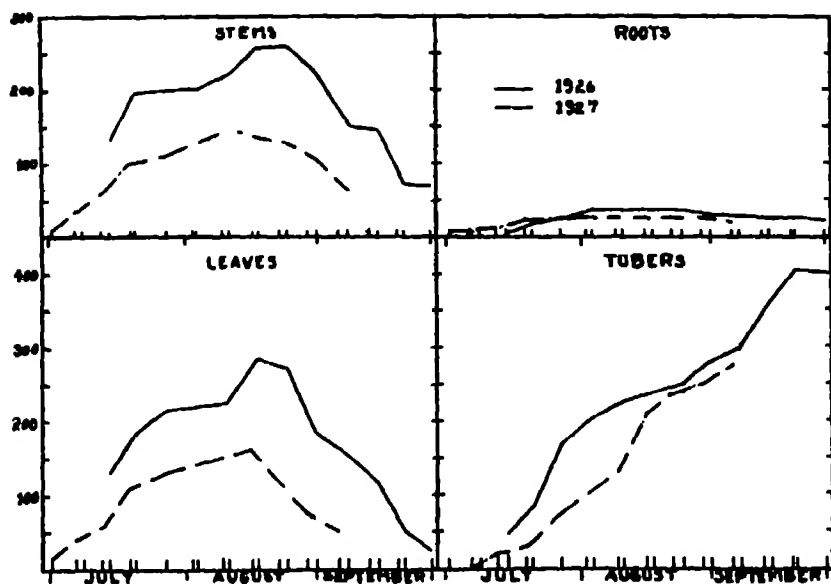


Plate V Growth curves for the various organs of the potato plant for 1926 and 1927 (Average green weight per plant)

somewhat surprising since much of it took place while the plants were wilted.

The Moisture Content

The moisture content of the various organs of the potato plant (Plate VI) was maintained at a slightly higher level than was observed for the other two plants, but otherwise was similar. The moisture percentage decreased somewhat as the season advanced. During the drought, however, the leaves suffered a very marked decrease in moisture, which continued until death occurred. It seems that these leaves were quite incapable of maintaining their moisture level. The stems, roots, and tubers, however, showed no such effects, but retained approximately equal amounts of water during the two years. This probably is explainable on the basis of the rapid decline of the leaf area without a proportional reduction of the roots.

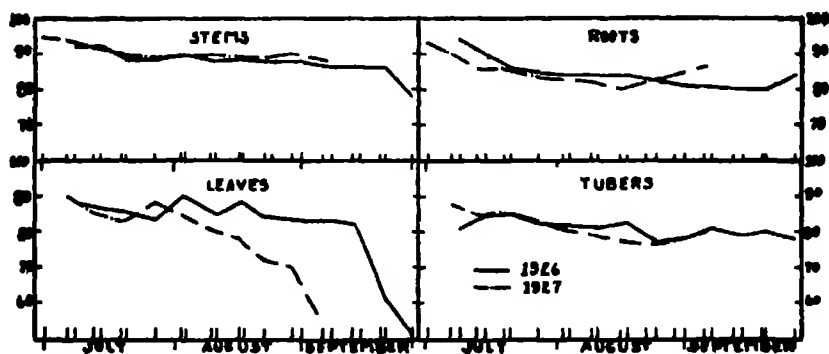


Plate VI. Moisture content of the various organs of the potato plant for 1926 and 1927. (Percentages of the green weight)

Carbohydrate Metabolism

The various carbohydrate fractions of the several organs of the potato plant are shown on Plate VII. Sucrose is again combined with the reducing sugars, and the starch content is shown only for the leaves and the tubers.

Leaves

The soluble sugar percentages increased toward the middle of the growing season of 1926 and then steadily decreased. These materials constituted a larger proportion of the dry matter of the leaf in 1927, particularly during the second half of August. In 1927, the leaves contained larger amounts of starch than in 1926 until late in August—another indication that the plant was not moving its materials readily. Unlike either the soy bean or the sunflower, the potato was incapable of maintaining larger amounts of hemi-celluloses in 1927 than in 1926.

Stems

The soluble sugars of the normal stems were maintained at a moderately high level until late in August, when they became very abundant. This increase corresponded to the time of growth cessation. The sugar reserve, however, disappeared from the stems before the season ended, apparently being moved to the tubers. In 1927, the same accumulation occurred but nearly six weeks earlier. The fact that the starch content of the tubers during this period was much below that of 1926 may account for the accumulation of sugars in the stem. This again indicates an inadequate translocatory mechanism during drought. Unlike the

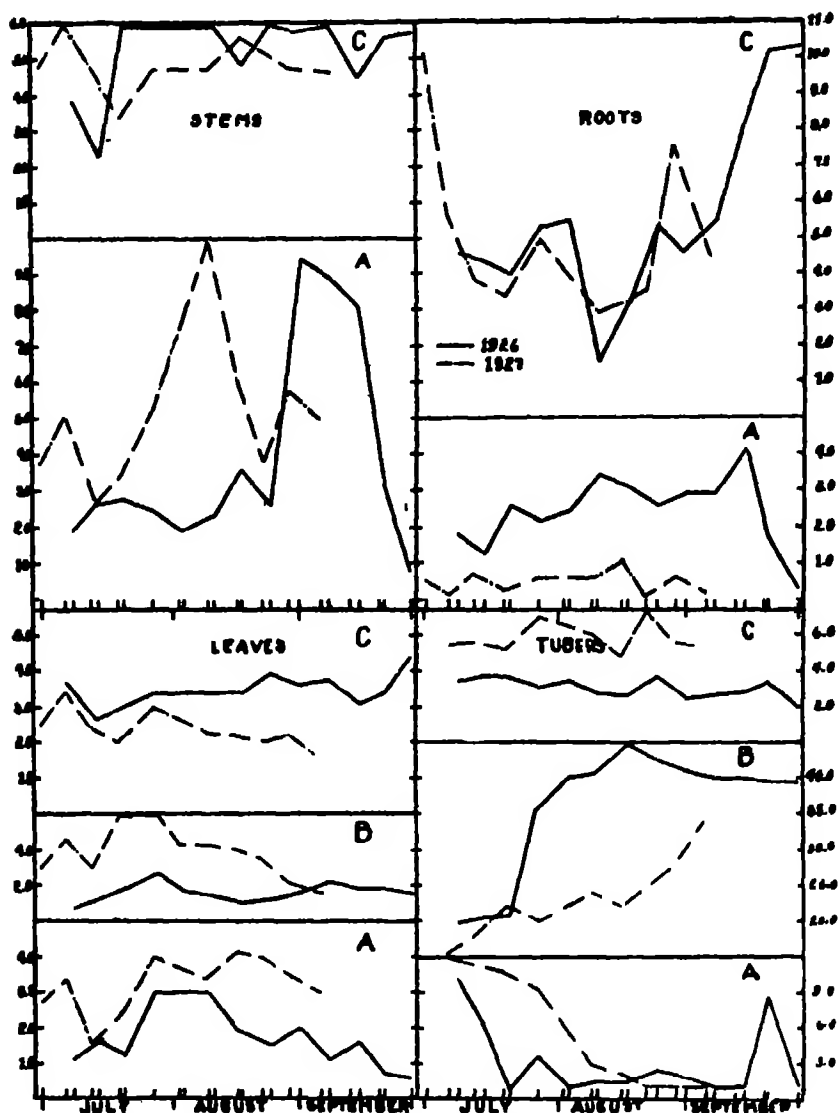


Plate VII. Carbohydrate content of the various organs of the potato plant for 1926 and 1927. (Percentages of the dry materials.) Fig. A: simple sugars and sucrose. Fig. B: starch. Fig. C: hemi-celluloses.

situation found in the soy bean and sunflower stems, the hemi-celluloses of the potato stems were less abundant in 1927.

Roots

The soluble sugars of the potato roots were plentiful during 1926 but at a much lower level during 1927. This was true also of the other two plants. The hemi-celluloses of the 1926 plants reached a very low level in August and then increased at a very rapid rate until they represented more than ten per cent of the dry weight of the roots. This probably indicates that these materials are stored as food during a very favorable growing season. In 1927, the hemi-cellulose content was very high early in the season but dropped away rapidly and never regained the large quantities at the end of the season.

Tubers

The soluble sugars, particularly sucrose, were very abundant in the young tubers. They decreased in quantity sooner in 1926 than in 1927. Apparently the conversion to starch is affected in a manner similar to fat formation in the soy bean and sunflower. In 1926 the sugar content rose abruptly toward the end of the growing season (probably in response to a heavy movement of sugars from the stems)—a circumstance not observed in the 1927 series. The starch content of the 1926 tubers rose rapidly until by the middle of August it represented forty-five per cent of the dry weight of the tubers. There was a slight decrease in the starch content as the tubers grew and matured. In 1927, the tubers seemingly were of poor quality, for although the tubers were growing rapidly enough the starch deposition was lagging far behind. The starch did build up to thirty-four per cent by the end of the season, but the general metabolic vigor of the plants of the two seasons seems nicely reflected in the starch development of the tubers. The hemi-celluloses of the 1927 tubers were about twice as abundant as in 1926, although normal percentages seem to be low.

Nitrogen Metabolism

The quantities of the various nitrogen fractions found in the several organs of the potato plant are reported on Plate VIII. There is little difference between the potato and the other two plants used. The nitrates and the amino acids in the various organs were consistently higher in 1927 than in 1926, although not markedly so. Though the total nitrogen of the leaves was generally higher during 1927, the total

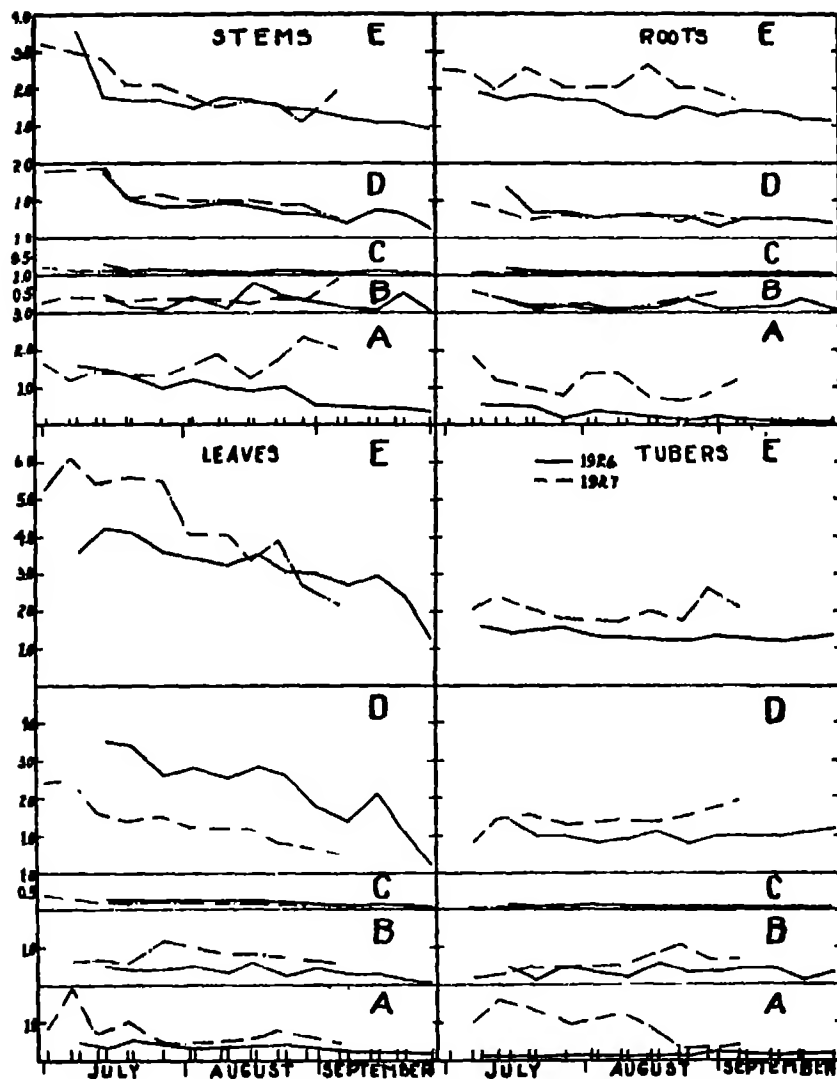


Plate VIII The nitrogen content of the various organs of the potato plant for 1926 and 1927 (Percentages of the dry materials) Fig A: nitrate and ammonium nitrogen. Fig B: alpha-amino acid nitrogen Fig C: phosphotungstic acid precipitate. Fig D: total soluble organic nitrogen, Fig. E: total organic nitrogen.

soluble nitrogen was considerably lower. Otherwise, there was little to distinguish the nitrogen metabolism of the potato from that of the soy bean or sunflower.

General Discussion

The data representing the metabolically active substances as well as the general growth data show clearly the relative effects of the drought on the three plants. In Table I are summarized the 1927 growth data expressed as percentages of the growth made by the same organ under the more favorable conditions of 1926.

TABLE I
Growth of the 1927 Plant Organs
(Percentages of the 1926 Growth)

Organs	Soy Bean	Sunflower	Potato
Leaves	75.0	60.0	52.0
Stems	75.0	60.0	57.0
Roots	82.0	87.0	75.0
Storage Organ	94.0	75.0	67.0

It is apparent that the soy bean suffered least, the sunflower next, and the potato most. It is curious that in each case the roots in the upper foot of soil suffered less than did either the stems or the leaves. It is further apparent that the storage organs suffered, though considerably less than either the stems or the leaves. It seems that the drought affects the roots less because they are not so much exposed, but, because of this, the smaller tops are provided with a proportionally larger root system. Further, it seems that during a drought the plant uses less of its food and is therefore capable of storing larger proportions of it than when growth is active.

Before the mechanisms of drought resistance employed by the various plants are discussed, it is necessary to point out the somewhat unexpected results found in the nitrogen metabolism of all three plants during the drought period. Though it has been generally shown that a reduced water supply will limit nitrogen assimilation, the data herein reported indicate the reverse situation. That moisture was definitely lacking need not be argued, yet the plants during this year maintained a higher nitrogen level than did the plants in 1926. Had these results been reported on a residual dry weight or on a green weight basis, the

discrepancy would have been even greater, since the carbohydrates are usually more abundant and the moisture content is somewhat lower. Further, if the total organic nitrogen,⁵ particularly the soluble organic nitrogen,⁶ is higher in one group of plants in which there is a plentiful supply of carbohydrates, these plants should be more vigorously vegetative, and yet under the field conditions employed in these studies, the reverse was the case. If only the protoplasmic nitrogen as well as its soluble building materials and the carbohydrate foods are used as criteria for growth, it appears that only a two dimensional picture of the plant's metabolism is portrayed. It would seem that the third dimension is one indicating activity. That is, the carbohydrate and nitrogen content shows the equipment which the plant possesses but does not indicate anything regarding the actual utilization of it. This appears to be a function of water as well as of temperature. If the water supply is not plentiful so that the transpiration rate for the whole plant is reduced through the reduced absorption of radiant energy, or through greater water retention⁷—though other conditions may be favorable—the plant must necessarily become adapted to a less active metabolism, for it will be subjected to less favorable circumstances, particularly with regard to temperature changes. This obviously implies greater protoplasmic stability and therefore slower growth. If the water supply is adequate or excessively abundant, the plant may then be limited by one or the other of the food reserve materials.

It is possible that an index of the activity of protoplasm beyond actual growth data would involve a study of the degree of dispersion of the colloidal system within it as well as knowledge regarding the speed with which materials move to and from its surfaces. To be sure, the more viscous the liquid medium the more slowly could interfacial exchanges take place. Such increased viscosity could be obtained by reducing the water content of the system, or by increasing the solutes in it, or by introducing turgescient lyophiles. That all these things have happened in the plants studied under drought conditions is indicated by the analytical data, as well as by the difficulty with which the more

⁵ E. J. Kraus and H. R. Kraybill, "Vegetation and Reproduction with Special Reference to the Tomato," *Ore. Agric. Exp. Sta. Bull.* No 149 (1918).

⁶ G. T. Nightingale, "The Chemical Composition of Plants in Relation to Photoperiodic Changes," *Wis. Agr. Exp. Sta. Res. Bull.* No 74 (1927).

⁷ Harry F. Clements, "The Significance of Transpiration," *Plant Physiology* IX (1934), 165-172.

resistant plants are separated from their water.⁸ It would seem, then, that one method which a plant might employ in resisting drought is that of a partial stabilization of its protoplasm. It appears that the soy bean uses this method. The very marked increases of the hemi-cellulose content of its leaves and stems after the plants have wilted for a few days, and the fact that, following the increase of these materials, the plant was capable of enduring an even greater drought without wilting, both show that there is a relationship between these materials and drought resistance. As pointed out in a previous paper,⁹ the ability of a plant to produce large quantities of hemi-celluloses is a function quite different from the ability of a plant to maintain large quantities. All three of these plants used in these studies under favorable conditions produce large quantities as storage materials, but under the unfavorable conditions of a drought, only the soy bean was capable of producing and maintaining large quantities of these materials. The sunflower was able to produce larger amounts of them than was the potato, but neither compared favorably with the soy bean. That this group of materials has not been clearly defined does not detract from the significance of this correlation. Since the pentosans as well as certain hexosans are among these materials, their lyophilic properties could be of considerable value in stabilizing the protoplasm. Only the soy bean seems clearly to possess this mechanism.

There is another possible significance associated with these materials in the soy bean leaves and stems. It is true that growth was retarded and hence the plant could endure wilting more easily, but the fact remains that after a while it no longer wilted even though the drought continued and even became more intense. This suggests that these materials are actually capable of reducing water loss. Presumably when the leaf is receiving water plentifully the cell walls of the mesophyll are thoroughly wetted and evaporation from them into the intercellular spaces is similar to evaporation from a free surface. If the rate of evaporation exceeds that of water intake by the cell, the state will be reached in which the outer part of the cell wall becomes dry, and then evaporation will be reduced in proportion to the reduction of the exposed water area. In other words, evaporation under this circumstance must take place through the capillaries of the wall. Essentially the same

⁸ J. T. Rosa, "Investigation on the Hardening Process in Vegetable Plants," *Mo Agr Exp Sta Res Bull* No 48.

⁹ Harry F. Clements, "Hourly Variations in the Carbohydrate Content of Leaves and Petioles," *Bot Gaz*, LXXXIX (1930), 241-72.

reduction in evaporation takes place after a semi-gel is exposed to dry air for a time. The hemi-celluloses of the lyophilic type could contribute in two ways to this retardation: first, because the drought-resisting cells are thickened by these substances, the capillaries in the walls are lengthened and hence the water surface is farther removed from the intercellular space. The result is an increase of the vapour pressure directly over the water surface as well as of the resistance to the movement of water vapour outward; second, it is possible that desiccation under severe circumstances proceeds inwardly more rapidly than does the outward movement of water. The subsequent wetting of these dried walls would be more difficult and the movement of liquid water through these capillaries would be retarded. The presence of lyophiles within the cell sap would make the water less amenable to capillary flow, the water loss being thereby further reduced.

The soy bean seemingly showed no response other than the increase of these polysaccharides. The soluble sugars were no more abundant during the drought than at other times. An increased starch content could hardly have any significance other than temporary food storage and thus would be an indication of congestion. The hemi-celluloses were the only materials which showed a marked response to the drought period and it would seem reasonable that they are significantly associated with the ability of the plant to resist drought.

The sunflower was less able to adjust itself to the drought. It wilted as the drought became more severe, but, unlike the soy bean, it never made the protoplasmic adjustment which made wilting unnecessary. It was also unlike the soy bean in that it showed no marked increase of its hemi-cellulose material. Perhaps this explains its inability to retain its leaves. It did, however, show a very marked increase in the quantity of soluble sugars retained by the leaves during the drought period. The presence of sugars seems to afford protoplasm considerable protection against death by freezing¹⁰ and possibly also by plasmolysis.¹¹ Such a mechanism can at best, however, be of only temporary value in a persistent drought. Death finally removed a large portion of the evaporating area of the plant, and this in itself was the means which enabled the sunflower to live through the season and complete its life cycle.

¹⁰ N. A. Maximov, "Chemische Schutzmittel der Pflanzen gegen Erfrieren," *Ber. Deutsch. Bot. Gesell.*, XXX (1912), 52-65, 293-305, 504-516.

¹¹ R. B. Harvey, "Hardening Process in Plants and Developments from Frost Injury," *Jour. Agr. Res.*, XV (1918), 83-112.

The potato was least successful in its struggle against drought. It possessed neither the ability to maintain a large quantity of hemi-celluloses nor a very great soluble sugar content in its leaves. It did show a tendency to have a higher sugar content during the drought period than before, but possessed less of the hemi-cellulose material than either of the other two plants. It was also the least resistant.

Summary

1. The growth and metabolism of the sunflower and the potato were studied under favorable field conditions and compared with similar data gathered under drought conditions.
2. Though growth of both plants was reduced under the drought conditions, the reduction of growth of the potato was greater than that of the sunflower. The soy bean, however, suffered less than either of these plants.
3. The only marked metabolic response of the sunflower to the drought was a great increase in the amount of soluble sugars in the leaves and stems.
4. The hemi-celluloses were more abundant in the sunflower leaves than in the potato but were considerably less abundant than in the soy bean.
5. The nitrogen metabolism was maintained at high levels during the drought period.
6. The sunflower met the drought by reducing its leaf-area. The potato was without any adequate means of resisting the drought and died prematurely.
7. The possible significance of the high nitrogen metabolism, the large quantities of simple sugars of the sunflower, and the hemi-celluloses of the soy bean is discussed.

FUNGI WHICH CAUSE DECAY OF APPLES IN COLD STORAGE¹

GEO. D. RUEHLE

Beginning in the fall of 1926 and continuing through 1927, 1928, and 1929, a detailed study was made of the fungi causing decay of Washington apples in cold storage. Apples from representative districts obtained from commercially packed lots and placed in cold storage were given systematic examinations at intervals during their storage life and isolations of fungi made from the lesions which appeared. A total of 1,118 isolations were studied. The following fungi were isolated and proved by inoculation tests to be capable of causing decay either at cold-storage or higher temperatures:

PHYCOMYCETES

Mucor puriformis Fischer

Rhizopus nigricans Ehr.

ASCOMYCETES

Pleospora fruticicola (Newton) Ruehle

Mycosphaerella tulasnei Jancz.

FUNGI IMPERFECTI

Phoma, No. 1

Phoma, No. 2

Coniothyrium, No. 1

Coniothyrium, No. 2

Microdiplodia, sp.

Gloeosporium perennans Z. & C.

Pestalotia hartigni Tub.

Coryneum folucolum Fekl.

Oospora, sp.

Cephalosporium carpogenum, n. sp.

Penicillium expansum Lk.

Penicillium puberulum Banier

Penicillium verrucosum Biourge

Penicillium olivino-viride Biourge

Penicillium viridicatum Westling

Penicillium martensii Biourge, and 5 other (unidentified) spp.

Sporotrichum malorum Kidd & Beaum.

Sporotrichum carpogenum, n. sp.

¹ Abstract of a dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Agriculture (Plant Pathology), State College of Washington (1930). Published in part as follows:

New Apple-Rot Fungi from Washington. PHYTOPATHOLOGY 21: 1141-52. 1931.
The Rots of Washington Apples in Cold Storage. WASH. AGR. EXP. STA. BUL. 253: 1-48. 1931.

Botrytis cinerea Pers.

Botrytis mali, n. sp.

Cladosporium malorum, n. sp.

Cladosporium herbarum Lk. (See *Mycosphaerella tulasnei*)

Hormodendron cladosporioides (Fr.) Sacc.

Stemphylium congestum Newton

Stemphylium congestum Newton, var. *minor* Ruehle

Stemphylium (See *Pleospora fructicola*)

Alternaria tenuis Nees.

Alternaria mali Roberts

Alternaria No 3

Alternaria No. 4

Alternaria No 5

Fusarium No. 1

Fusarium No. 2

Ramularia magnusiana (Sacc.) Lind.

Ramularia No 2

Epicoccum granulosum Penz

BASIDIOMYCETES

Corticium centrifugum (Lev.) Bres

Descriptions are given of the morphology of these forms as they developed on culture media or on the apple.

Blue mold decay was by far the most important type of rot encountered, causing 75 to 80 per cent of storage decay caused by fungi during the usual storage life of the varieties under observation. This serious disease was found to be caused by at least ten more or less distinct species or strains of *Penicillium*. Of these *Penicillium expansum* was the only one that caused serious damage.

A more or less definite succession of parasites appeared during the storage season. In the early examinations, most of the decay was of the *Penicillium* or *Botrytis* type. Later examinations revealed the presence of many dark rots of the *Alternaria*, *Stemphylium*, and *Pleospora* types, with no new infections of *Botrytis* and a lessened number of new *Penicillium* infections. Late in the storage season, such fungi as *Sporotrichum malorum* and *Gloeosporium perennans* produced their maximum attack, with the dark rots also prevalent.

Suggestions are given for the prevention of decay in cold storage.

PHYSIOLOGICAL AND GENETICAL STUDIES ON DELAYED GERMINATION IN *AVENA*¹

LEROY P. V. JOHNSON

Part 1. General preliminary studies on the physiology of delayed germination in *Avena fatua*.

General preliminary studies were made on the physiology of delayed germination in *Avena fatua*, the results of which may be summarized as follows: (1) Great variations were found in the after-ripening periods of a number of *A. fatua* selections. (2) Evidence was obtained which strongly indicated that delayed germination is determined by a condition of the seed coat which develops after the fertilization of the seed in question. (3) Results from tests of entire panicles indicated a correlation between germinability and the position of the seed in the panicle. (4) The after-ripening period of secondary grains was shown to be much longer than that of primary grains. (5) The placing of incompletely after-ripened grains under germinative conditions induced secondary dormancy. (6) Exposure to light appeared to stimulate germination slightly in seeds which were in the early stages of after-ripening, but appeared to have a harmful effect upon seeds which were more or less completely after-ripened. (7) Low, dry-storage temperatures retarded the after-ripening process. Storage in a frozen condition at freezing temperatures resulted in increased germination. Seeds moistened and subjected to outdoor conditions failed to germinate. (8) Dormancy was more or less completely overcome by breaking the seed coat over the embryo, or by soaking seeds in potassium nitrate solutions. The exposure of seeds under germinative conditions to an atmosphere having an increased oxygen concentration definitely stimulated germination. Treatments with pure oxygen, ether, and sodium thiocyanate had more or less indifferent effects upon germination, whereas ethylene chlorhydrin and dichlorethylene were definitely injurious.

It is inferred from the combined results that delayed germination is due to post-fertilization changes, related either to tissue absorption

¹ Abstract of a dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Agriculture (Agronomy), State College of Washington (1935). Published as "General Preliminary Studies on the Physiology of Delayed Germination in *Avena fatua*," *Canadian Journal of Research*, XIII (1935), Sec. C, pp. 283-300; and "The Inheritance of Delayed Germination in Hybrids of *Avena fatua* and *A. sativa*," *Canadian Journal of Research*, XIII (1935), Sec. C, pp. 367-87

or development, which occur in the seed coats of *A. fatua* but not in those of readily germinable species, and which result in a restriction of the oxygen supply to the embryo. It is believed that the after-ripening process may consist, essentially, of a series of changes in the tissues of the seed coat which result in an increased permeability to oxygen.

Part 2. The inheritance of delayed germination in hybrids of *Avena fatua* and *A. sativa*.

The inheritance of germinability was studied in reciprocal crosses between *Avena fatua*, the seeds of which are non-germinable for several months after harvesting, and *A. sativa*, the seeds of which are fully germinable shortly after harvesting. The following conclusions were drawn from studies of the first three hybrid generations: (1) Germinability is genetically dominant over non-germinability (delayed germination). (2) There is strong evidence that germinability is inherited on the basis of three factors of more or less equal germinative potencies, one of which is linked with the factor for grain type. (3) At the time of testing, embryos having completely recessive genotypes were non-germinable; embryos having genotypes with one dominant allelomorph were non-germinable, except in rare instances; embryos having genotypes with two dominant allelomorphs (of the same or different factors) were to a very great extent germinable; embryos having genotypes with three or more dominant allelomorphs were germinable. (4) The germinative potentialities of genotypes vary with the time elapsing between harvesting and testing. (5) There is some evidence that the linked factor has a greater germinative potency than either of the non-linked factors.

BIOLOGY AND CONTROL OF THE DOUGLAS-FIR BEETLE
DENDROCTONUS PSEUDOTSUGAE HOPKINS (COLE-
OPTERA - SCOLYTIDAE) WITH NOTES ON
ASSOCIATED INSECTS¹

WILLIAM DELLES BEDARD

Throughout the Douglas fir (*Pseudotsuga mucronata* Rafinesque) stands of western United States and Canada, groups of red-topped trees killed by the Douglas-fir beetle (*Dendroctonus pseudotsugae* Hopk.) are a common sight. As early as 1900, reports of the destructiveness of this insect were received by the Bureau of Entomology, and since that time the known volume of timber killed annually has gradually increased. At the present time it is estimated that at least ninety million board feet of mature timber are destroyed by this insect every year. In an attempt to stop increases in areas where infestations have grown to alarming proportions, control projects have been undertaken at various places since 1909.

Very little information is available concerning the earlier projects, but during the more recent work it became apparent that a thorough knowledge of the seasonal history and habits of the insect was needed in order to improve control methods. To secure this information, the study summarized in this paper was begun in 1930.

The Douglas-fir beetle attacks a healthy, living tree in large numbers and kills it within one year by boring between the bark and the wood, thus girdling the tree. Trees attacked by this insect can be recognized by faded foliage, red boring dust clinging to the bark, or the presence of the insects themselves beneath the bark.

The female beetle begins the attack by boring a horizontal entrance tunnel through the bark to the soft new tissue, where she tunnels the longitudinal, unbranched egg gallery up the tree parallel to the grain of the wood. The male beetle follows the female, and, when about one inch of the egg gallery has been excavated, they mate, after which the male either returns to the bark surface to seek a new mate or remains in the gallery to assist with the disposal of the borings. Eggs are deposited in alternate groups of from two to thirteen eggs along the sides of the gallery and are held in their niches by frass which the

¹ Abstract of a dissertation submitted in partial fulfillment of the requirements of the degree of Doctor of Philosophy in Entomology, State College of Washington (1937).

female packs around them. Under field conditions fifteen days are required for egg incubation.

The larva begins to feed immediately upon hatching and as it feeds excavates a gallery at right angles to the egg gallery. During the course of this feeding the larva passes through five instars; the approximate durations of the various stadia, from the first instar to the fifth, are 6, 13, 16, 16, and 17 days, respectively. When the larva has reached the last instar, it excavates a shallow cell, in which it changes to a pupa. The pupal stage, from larva to new adult, requires eight days, after which the new adult feeds for a considerable time before emerging.

In all localities with climatic conditions approximating those in the areas where this study was made, the Douglas-fir beetle requires approximately one year to develop from the egg stage to the time when the mature beetle emerges and attacks new, living material. Thus there is but one generation of this insect each year, although during optimum seasons there may be a partial second generation. In addition, each female propagates two broods, so that in all there are two broods and one generation.

In the control of the Douglas-fir beetle the burning of infested logs has been found to be more efficient than peeling them, because the removal of the bark will not destroy the larvae which are concealed within the inner bark. Furthermore, peeling will not destroy the parent adults which will emerge and reattack other trees. In the burning method of control, the trees are felled, cut into logs, and skidded into decks for burning.

Although considerable advancement has been made in the study of the agents active in the biological control of the Douglas-fir beetle, no direct application of this control method can be recommended. One modification of the burning method, however, appears quite feasible, whereby most of the important parasitic and predacious insects would be saved. That is, if control were undertaken during June, most of the valuable parasites and predators would still be in the old trees abandoned by the Douglas-fir beetle when they emerged to make the attacks of the current season. The parasitic and predacious insects to which this modification in control would be beneficial cause a normal mortality of 89.2 per cent of the broods of the Douglas-fir beetle. This mortality is apportioned within the various developmental stages as follows: egg,

62.5 per cent; larval, 18.5 per cent; pupal, 4.1 per cent; new adult, 4.1 per cent.

Coeloides brunneri Vier. is the most important parasite of the Douglas-fir beetle, parasitizing an average of 29 per cent of all larvae destroyed. The seasonal history of the braconid is synchronized with that of its host, so that mature Douglas-fir-beetle larvae are available when this parasite is ready for oviposition. *Cecidostiba dentroctoni* Ashm. and *Pachyceras eccoptogastri* Ratz., two small pteromalids, are also parasites of the Douglas-fir beetle.

The most important predators which attack the Douglas-fir beetle are: a mite, *Scius safroi* Ewing, which feeds on the eggs; two clerid beetles, *Thanasimus dubius* Fab and *Enoclerus sphegeus* Fab.; and two dipterous predators, *Medeterus aldrichi* Wheeler and *Lonchaea corticis* Taylor. Other, less important, predators are: another clerid beetle, *Enoclerus lecontei* Wolc; the green ostomid *Temnochila virescens* Fab.; and another fly, *Xylophagus abdominalis* Lw.

Many other insects are found beneath the bark of the Douglas-fir trees infested by the Douglas-fir beetle. In all, seven orders are represented: Collembola, Corrodentia, Hemiptera, Coleoptera, Lepidoptera, Diptera, and Hymenoptera. These insects serve different purposes: some make use of the dying tree for food, others are scavengers, secondary parasites, and predators; still others may use the tree merely for hibernating purposes.

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THE CREATION AND DISSOLUTION OF THE DANISH-SWEDISH ALLIANCE OF 1628: <i>Francis J Bowman</i>	129
BYRON'S INTEREST IN THE AMERICAS. <i>B R McElderry, Jr</i>	145
THE POLICY OF THE AMERICAN STATE DEPARTMENT TOWARD MISSIONARIES IN THE FAR EAST <i>Harold J Bass</i>	179

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THE CREATION AND DISSOLUTION OF THE DANISH- SWEDISH ALLIANCE OF 1628

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Few of those who witness the close cooperation between the Scandinavian nations today realize how new and unusual such pacific understanding is. For generations the national consciousness of each northern power disclosed itself in relentless animosity against its blood brothers. Jealousy and distrust, intrigue and warfare were the natural expressions of this feeling, especially in the sixteenth and seventeenth centuries. More than a century elapsed with only one true treaty of alliance being signed between Sweden-Finland on the one hand and Denmark-Norway on the other. Yet this treaty, singular of its kind between 1570 and 1680, has received no such treatment from Danish and Swedish scholars as has centered upon Bromsebro, Roeskilde, and Copenhagen. For Denmark the disastrous Peace of Lübeck, signed only a year later, was much more significant. For Sweden the turmoil attending the Truce of Altmärk, the German expedition of Gustavus II Adolphus, and the widening of the diplomatic horizon incident thereto, pushed this pact into the limbo of forgotten things. But it is worthy of resurrection and study, both because of what it accomplished and because of what it failed to accomplish.

The treaty in itself was seemingly neither logical nor proper, but was a fortunate effect of an earlier unfortunate competition between Christian IV and Gustavus II Adolphus. During 1624 and 1625 the rivalry between these rulers reached such a point that another war between Sweden and Denmark was imminent.¹ Yet the tension lessened when Gustavus Adolphus found that the terms he asked from France, Holland, and England for his intervention in the Thirty Years'

¹ *Svenska Riksrådets Protokoll* (ed by N. A. Kullberg, Stockholm, 1878), I, 4, Axel Oxenstjerna to the Royal Council, Dec. 10, 1624; M. G. Schybergson, *Sveriges och Hollands diplomatiska Förbindelser, 1621-1630* Belysta med aktstycken (Band 36, Bidrag till kännedom af Finlands natur och folk, Helsingfors, 1881), pp. 63 ff., Salvius' Instruktion till Holland, January, 1625.

War would not or could not be met by these powers and that Christian IV had underbid him. The Swedes still had an account to balance with Poland, and for the time being were willing to leave military action on the German plains to Danish regiments. They restricted their diplomatic activity to a maintenance of friendly connections with the Protestant cities and princes of the Baltic coast and of the Lower Saxon Circle. The Danish king saw in the secularized bishoprics of that area the future possessions of his younger sons, hoping to bring the Hanseatic cities under his control and to dominate as a result the valleys of the Weser, the Elbe, and the Oder.² Inevitably such a policy would force these principalities and powers to choose between the King Log of the Holy Roman Empire and the King Stork of Denmark-Norway. Some at least sought the friendship of Sweden in order to escape decision.

The King of Sweden turned to the eastern and southern shores of the Baltic and to his campaign against Poland. In the fall of 1625 military operations flared up in the valley of the Düna, and the victory won by Gustavus at Wallhof, January 6/16, 1626, secured Riga from Polish attack and completed the conquest of Livonia. Six months later a Swedish fleet sailed into the harbor of Pillau and the first of the four Prussian campaigns began. Within a year the Swedes were masters of the sea-coast of East (Electoral or Ducal) Prussia from Pillau westward and of much of West (Royal) Prussia as well. They gained possession of Elbing and sequestered most of the Bishopric of Ermland. Of all the sea-ports belonging to the King of Poland, only one, Danzig, remained open in 1627.

This series of successes for Gustavus II Adolphus contrasted sharply with the misfortunes of Christian IV. Christian moved forward between the Elbe and the Weser to make head against the forces of the Catholic League under Tilly. The left wing of his army, under Ernest of Mansfeld, was expected to hold the line of the Oder in Brandenburg and Silesia. Wallenstein crushed this force at the bridge of Dessau and pursued the shattered remnants so relentlessly that, after flight through Silesia and Moravia to Hungary, this army ceased to exist. The Danish king attempted a concentration to the rear but Tilly caught him in full retreat at Lutter am Barenberge. His cavalry was decimated, his infantry destroyed, his artillery captured. For nearly a

² Julius Otto Opel, *Die niedersächsisch-dänische Krieg*, I (Halle, 1872), *passim* and II (Magdeburg, 1878), 41-73.

year the Danes managed to keep a precarious hold upon Mecklenburg and Holstein, but in August, 1627, the army of the League crossed the Elbe and revealed the weakness of Christian's position. Catholic regiments overwhelmed Pomerania and Mecklenburg, besieged and captured the fortresses of Holstein, occupied Schleswig, and swept in cavalry raids to the very northern tip of Jutland. Denmark had not a foot of soil left on the mainland to call her own.

The Swedes had early arrived at the conclusion that Denmark-Norway was not able to bear the weight of a German war, and that a day would come when the Baltic situation might so change that Gustavus II Adolphus would be forced to act to restore the balance of power. The Chancellor of Sweden, Axel Oxenstjerna, assured the Chancellor of Brandenburg, Sigismund von Gotzen, on January 5, 1626, that to guard the coast of the Baltic against Imperialist plans Sweden would intervene whenever or wherever need arose.³ The recipient of this letter sought out the Danish king in his camp at Wolfenbittel. Christian IV, cognizant of this frame of mind in Stockholm, declared that he was willing to hand over the French subsidies and the troops of Count Mansfeld to Gustavus if the latter would land at Kammin in Pomerania, march against Stettin, and then act to aid the Danes as circumstances might dictate. He begged von Götzen to secure the aid of his master, the Elector of Brandenburg, in bringing about actual Swedish intervention as quickly as possible.⁴

Here we have the germ of the later alliance, presented as the suggestion of a state for which both Denmark and Sweden were neighbors to be feared and placated. But the disaster at Dessau made Brandenburg anxious to dissociate itself from any aggressive proposal, so that when the Elector sent Samuel von Winterfeld to Sweden early in May of 1626 that gentleman was under orders merely to mention the idea of the Danish king, while urging strongly that Gustavus II Adolphus should land at Wismar in Mecklenburg, far enough from his borders to relieve the Elector from any embarrassment. Oxenstjerna and his master were not yet prepared to go farther than their previous statement. They were cold to the thought of an expedition to Mecklenburg and were preparing to put the Elector into a most painful position by

³ Axel Oxenstjerna, *Skrifter och Brevväxling* (Stockholm, 1888-), Series I, Vol. III, 296-297, Axel Oxenstjerna to Sigismund von Gotzen, January 5, 1626 (O.S.)

⁴ Opel, *op. cit.*, II, 448.

landing an army in East Prussia for a campaign against Poland.⁶ The only result of this first hesitating and round-about discussion was a letter from Gustavus II Adolphus to Christian IV, June 10, 1626, in which the former promised to keep the latter informed of his progress against Poland, and with some plausibility explained how easily this new *sedes belli* would allow him to follow the course of events on the German front. There was in this letter no word about cooperation between the two powers.⁷

II

A letter from Gustavus to Christian in which he related his success in Prussia introduced a new phase in the negotiations. Christian IV sent Jörgen Sehefeld to the camp of Gustavus at Dirschau with orders to inquire if the Swedish armament was directed against Poland only, or if it might not come to the aid of the German Protestants of the Lower Saxon Circle. In this latter case the Danish monarch declared himself ready to let a part of his troops join it for a campaign against Franconia and Bavaria, the headquarters of the Catholic League.⁸

But this proposal was as little to the Swedish taste as the previous one. Gustavus complained that he had waited all summer long for news from King Christian, and it was now mid-August. Little could be done before winter would close operations in the field, and that little should be done in Prussia. If Denmark could spare any battalions they should be directed to Elbing, where they would be very welcome. He suggested that Danish and Swedish commissioners meet at some north German port, such as Stralsund or Stettin, and close a definitive pact in the matter. His first condition would be a defensive alliance between Denmark and Sweden against both the Catholic League and Poland, and his second a pledge that neither nation should negotiate an individual peace.

In further development of his ideas for a "diversion," the Swedish king held that a strong force should be sent through Posen against

⁶ Winterfeld, *Relation*, 17 juli, 1626, found in the Archives at Berlin. There is also a MS copy at Upsala, E 379 H., Hammarstrand's *Afskrifter*. It is summarized in Swedish by N. Ahnlund, *Gustaf II Adolfs första preussiska fälttåg* (Stockholm, 1918), pp. 96-101.

⁷ MSS. RikaArkivet, Stockholm, *Riksregistraturet*, 1626-32 [Registry of the Realm, royal letters and instructions, in copy], Gustaf Adolf till Kristian IV, den 10 juni, 1626. Hereafter RikaArkivet, Stockholm is abbreviated as RAS.

⁸ MSS RAS, *Tyskt-latinskt registratur*, 1626-1627 [German - Latin Register], Jörgen Sehefelds inläga, den 16de augusti, Dirschau.

Silesia. If the first attempt failed, it could be repeated until the Emperor and the League declared war upon Gustavus. Denmark should send three thousand cavalry and seven thousand infantry to Prussia before Michaelmas to join the march upon Silesia, and should support these forces in the field. The Danish and Swedish fleets should co-operate against any attack, but each should be free to carry out offensive designs individually planned. Neither side was to hinder the transport of military forces through the territorial waters of the Baltic area, but each was to assist the other in the necessary recruiting activity.⁸ These demands asked in fact of the Danish king that he transfer to the Swedish monarch the initiative in both the Polish and German areas of conflict, and that he become an enemy to Poland, long the recipient of "benevolent neutrality" from Copenhagen. It was no wonder that Christian IV, in answering the King of Sweden's letter on September 30, declined to consider further negotiations on the subject.⁹ With the lost battle at Lutter behind him, he could accept no new responsibilities; and he was not yet in such dire straits that he asked aid from Sweden at any price.

The idea of alliance, once securely imbedded in the mind of the Swedish king, did not, however, so readily leave his thoughts and plans. In the fall of 1626 he dispatched Christopher Louis Rasche to Copenhagen with plans for "an alliance offensive and defensive," and when that diplomat failed in his mission the work was continued by the Swedish Resident there, Jonas Buræus, who in March, 1627, was ordered to try to get the Danish king to sign at least a defensive alliance.¹⁰ But for weeks and months that monarch seemed willing to let day follow day with no definite answer to the Swedish propositions.

For nearly a year the military situation in northern Germany remained in stalemate. Then it changed suddenly, and with its change ended also the lethargy on the diplomatic front. Early in July, 1627, Christian IV asked Gustavus II Adolphus to check the movement of provisions by ship to Pomerania, then threatened by the Imperialists.

⁸ MSS. RAS, *Tyskt-latinskt Registratur, 1626-1627*, in Latin, Resolution till Jörgen Schefeld, den 19de augusti, 1626.

⁹ MSS. RAS, *Danica-VII, Diplomata: Konungarne Fredrik II och Kristian IV Bref till Svenska Konungar, 1572-1632, Registratur* [Registry of letters from Frederick II and Christian IV of Denmark to the Kings of Sweden, 1572-1632], Kristian IV till Gustaf Adolf, den 30de september, 1626.

¹⁰ MSS. RAS, *Tyskt-latinskt Registraturet, 1626-1627*, Instruktion for Rasche, den 27de september, 1626 and MSS. RAS, *Rikets Registratur*, Instruktion för J. Buræus, den 26te mars, 1627.

Gustavus at once acceded to the request, in turn asking the Danes to exercise similar precautions in regard to ships headed for Danzig and Polish Prussia. This correspondence was of little moment, but in August came the news that Tilly's army had crossed the Elbe. By September the Danes in Mecklenburg, under the Marquis of Baden, were taking ship from Rostock and Wismar for the islands, and the Danish troops in Holstein were driven into the fortresses of Krempe and Glückstadt. These events and the danger to Schleswig and Jutland were mirrored in Christian's letter to Gustavus of September 12, 1627, and his instructions to Otto Skeel of the same date.¹¹ Skeel was to suggest a formal alliance between the two realms for their mutual defence, the good of the evangelical cause, and the safety of the Baltic. The king asked the aid of seven or eight Swedish warships to blockade Lübeck, Wismar, Stralsund, and Stettin and cut off all trade thither in munitions and provisions. In return the Danes would stop all similar contraband headed for Danzig through any straits or harbors under their control and inspection.

Nor did the Danish king's letter mince words about the aims of the enemy. Christian IV revealed that the Duke of Holstein had brought from Wallenstein the proposal that to secure a peace he should allow the Emperor to hold the Sound,¹² the famous strait between Scania and Seeland, both then Danish provinces. Through it passed the commerce of the Baltic, the dues of which would soon repay Austria for what the war cost her. Gustavus II Adolphus, newly arrived at Kalmar from Prussia, answered the letter on October 21 promising all possible aid. With winter rapidly approaching it might not be possible to send the ships asked for, but he reiterated his desire to act in concert with Denmark to secure the safety of the Baltic. He informed Christian that he would send representatives without delay to complete the negotiations for an alliance.¹³

Action now followed close upon decision. Gustavus sent instructions on October 21 to Rasche and Karl Banér, men already in close touch with the Danish situation, envisaging three possible procedures on their

¹¹ MSS. Riga-Arkivet, Copenhagen, *Sverge-A 1626-1634*, Instruktions for Otto Skeel, 12 sept. 1627.

¹² MSS. RAS, *Danica-VII, Diplomata Konungarne Fredrik II och Kristian IV Bref till Svenska Konungar, 1569-1632*, Copior [Copies of letters from Frederick II and Christian IV of Denmark to Swedish kings, 1569-1632], Kristian IV till Gustaf Adolf, Glückstadt an Elbe, Sept 12, 1627.

¹³ MSS. RAS, *Riksregistraturet, 1627*, fol 414-417, Gustaf Adolf till Kristian IV, Kalmar, 21 oct. 1627.

part. If the Danish king seemed eager for alliance and bent upon a Swedish diversion in Germany, they were to close at once with him on both points, merely reserving for Gustavus the direction of the enterprise and the subsidies from western powers which such a plan made necessary. If the Danish situation seemed desperate and the popular inclination to peace great, the Swedish envoys were to warn and threaten the commonality, strengthen the hands of the king, and inform all that in case of need twenty or thirty Swedish ships of war with accompanying army transports could be sent from Stockholm to the Sound, and that Gustavus had called home to Kalmar his very *corps d'élite* from Prussia and Livonia. Whenever Denmark wished it, eight to ten thousand veteran soldiers were ready to move to her aid—provisions being all that she would be called upon to supply. In the third eventuality—that peace negotiations had already begun between the Imperialists and the Danes—the two emissaries were to watch sharply their progress. Sweden had no reason to oppose a peace on terms honorable to Denmark. But should the articles include the surrender of the Sound, or of the Danish fleet, or allow the formation of an enemy camp on the Danish islands, then the envoys were not only to advise against it but to threaten Christian with the occupation by Swedish armed forces of the territory he still owned.¹⁴

The situation in Denmark had been quieted to such an extent that the Swedish representatives were able to win great diplomatic advantage without taking any real action. They excused the failure of their king to send his ships by reference to the storms of early winter, and suggested that Danish ambassadors would be welcomed at Stockholm, where the winter months could scarcely be better occupied than in negotiations.¹⁵ Christian IV hardly judged at its true value the pressure which his envoys would undergo in a foreign capital. After appointing Tage Thott and Chancellor Kristian Friis on October 28, he waited until December 2 to give these members of his royal council their final commissions. He now asked of Sweden help in men, money, and ships. He needed twenty ships of war, the same number of galleys,

¹⁴ MSS. RAS, *Tyskt-latinskt Registraturet 1626-1627*, Instruktion för Rasche och Karl Banér, den 27de oct. 1627.

¹⁵ MSS. RAS, *Germanica A-III, Diplomatica: Bref ifrån Agenten Christopher Ludvig Rasche (Rascha), 1621-1634* [Letters from the Agent Christopher Louis Rasche (Rascha), 1621-1634], Rasche to the King, Elsinore, Nov. 5, 1627; Rasche to the King, Elsinore, Nov.--, 1627 (presented Nov. 14/24, 1627, Stockholm).

and several thousand men if he was to win back Jutland and the Duchies. He hoped to be able, at some time in the future, to give equal assistance to the Swedish king. He would be willing to stop all supply of war material and men to Sweden's enemies by way of the Sound and could meet the Swedish requests for free passage there, but he would not give any aid to the offensive against Poland, nor would he sign a general pact against all the Catholic powers.¹⁶ Armed with these proposals and properly accredited, the Danish envoys arrived in Stockholm before Christmas, 1627, and at once began negotiations for an alliance.

The Danish emissaries soon found themselves at a disadvantage in the face of the specific and detailed proposals made by the Swedish plenipotentiaries. The Swedish Royal Council took the initiative at once and offered to equip a squadron of eight vessels of war to aid Denmark, the ships to be ready on June 1 and to keep the sea until winter. They were not, however, to be used against the Hanseatic towns unless these showed hostility to Sweden. Furthermore, Danish as well as Swedish warships were to pursue Polish freebooters and Christian IV should confiscate all vessels destined to Danzig which tried to pass the Sound without Swedish certificates of inspection. These three clauses were anything but welcome to the Danes; yet eight ships of 140 guns and 1100 men bulked large in their eyes, and on January 4, 1628, a preliminary pact was signed which included all that Sweden had demanded.

Correspondence between Stockholm and Copenhagen went on for four months, while the Danes sought to escape taking any action against Danzig or Poland. At last, on April 28, an alliance of three years' duration received the signature of plenipotentiaries of both powers. The Danes had secured the concession that Danish passes to Danzig should be of equal provenance with Swedish ones, but in return had to agree that Sweden was to be included in Denmark's treaties with her opponents, and Denmark in Sweden's pacts with her adversaries. Another important addition was the proviso that each nation was to carry on a lively and inclusive correspondence with the other.¹⁷ The almost impossible had at last happened and the two northern powers, whose kings and people had been rivals for generations, were in close alliance.

¹⁶ Christian Molbech, *Kong Christian den Fierdes egenhaendige Breve* (Copenhagen, 1848), I, 299; Kristian Erlev, *Aktstykker og Oplysninger til Rigsraadets og Stænder-mødernes Historie i Kristian IV's Tid* (Copenhagen, 1888), II, 83.

¹⁷ *Danmark-Norges Traktater 1523-1750 med dertil hørende Aktstykker*, edited by L. Laursen (Copenhagen, 1917), IV, 18-30, the official text.

III.

The Danish-Swedish alliance possessed a certain strength which must be evaluated with care, if we are to judge properly of its importance. It permitted each country to have a back clear of enemies at a time when that was a major consideration. Sweden could now carry on its campaigns against Poland, knowing that no men and munitions would reach Danzig through the Sound, and certain that freebooters would no longer disturb the Baltic area. Denmark raised the strength of her cruising squadrons by the addition of the eight Swedish ships and retained her full liberty of action in all that dealt with the Sound Dues, with the subsidies from the western powers, and with her relations to the Hanseatic cities. Even more important to Christian IV was his escape from a Swedish auxiliary corps on Danish soil and from a Swedish expedition to the coast of Mecklenburg or Holstein. Had the latter taken place, it would have been difficult to keep Gustavus II Adolphus from assuming control of the situation and jeopardizing any future that remained to Denmark in that area. In the spring of 1628 the German coast from Vor-Pommern westward still represented, as far as Christian was concerned, a Danish preserve in his *dominium maris Baltici*.

The pact had its weaknesses also. It did not contemplate offensive action by either party, and made no provision for such a contingency. Gustavus II Adolphus did not in any of its clauses subscribe to the idea that under this treaty he could not at any time he saw fit make the "German diversion" he had projected so often. Nor did he agree to the assumption implicit on Christian's part, that it limited the independence of the Hanseatic towns and their power to appeal to the Swedish ruler in emergency. When such an emergency did arise, it spelled disaster to the understanding so slowly reached.

The city of Stralsund had been in danger of occupation by Imperialist forces since November, 1627, and negotiations between the town and Wallenstein's subordinate, von Arnim, went on during the entire winter. The burghers were asked to equip war-vessels in its port and to place the harbor at the disposal of Wallenstein. When the city demurred, von Arnim, on February 4/14, 1628, occupied the little islet of Dänholm off the town, thus closing one of the entrances to its harbor. On February 12/22 the city paid him a large sum of money and believed that it would escape military occupation. But his men still held the Dänholm and the citizens rebelled against possible control of

this avenue of approach by Imperialist troops. They blockaded the island by armed merchantmen and on April 5/15 forced von Arnim to evacuate it on honorable conditions.¹⁸

Meanwhile Christian IV made three descents with some two thousand men upon the coast of Holstein, capturing Fehmern but being beaten off at Eckernförde and Kiel.¹⁹ At about the same time a Swedish fleet sailed to Prussia under command of the king's half-brother, Admiral of the Realm Karl Karlsson Gyllenhjelm, leaving Gustavus to follow a month later with three thousand men to reinforce the Prussian garrisons.²⁰ To both east and north the town of Stralsund turned in its need, and from both directions came help. The city fathers sent a Doctor Steinberg to Denmark, and on April 20 Christian promised men and ammunition. Three ships reached Stralsund on May 3 with sixteen cannon and five barrels of powder, which the city accepted. But the city government declined the services of five "constaplar" and two engineers sent by the Danish king as this would mean "open war against our liege lord the Emperor."²¹

Stralsund, which was a city of the Hansa, naturally turned also to the chief of the eastern Hansa towns, Danzig, to borrow powder. That city, blockaded by Admiral Gyllenhjelm, could give none and sent no answer to the request. The envoys had audience with the Swedish admiral, and he saw in their necessity an opportunity. He sent on April 26 all the powder he could spare, and referred them to his master for further aid. On May 18 a boyort brought the Swedish court secretary

¹⁸ *Grundlicher und Wahrhaftiger Bericht von der in Pommern belegenen Heubstadt Stralsundt*, u. s. w. (Stralsund, 1631), I, 30-31; Max Bär, *Die Politik Pommerns während des dreissigjährigen Krieges* (Band 64, Publicationen aus dem Königl. Preussischen Staatsarchiven, Leipzig, 1896), pp. 23-24; Otto Fock, *Rugensch-Pommersche Geschichten* (Leipzig, 1872), VI, 164-7, 178-180; Friedrich Forster (Ed.), *Albrecht von Wallenstein, Herzog von Friedland und Mecklenburg, ungedruckte eigenhändige vertrauliche Briefe und amtliche Schreiben aus dem Jahren 1627 bis 1634 an Arnheim (v Arnim), Aldringer, Gallas, Piccolomini*, u. s. w. (Berlin, 1828-1829), I, 217.

¹⁹ *Zwo warhafftige Neue Zeitung, die Erste, was massen der König in Denemarck vor der Statt Kuhl in Holstein sehen lassen*, (i. ? , 1628), pp. 2-3, Tilly to General Hannibal von Schaumburg, Kiel, April 9, 1628; *Theatrum Europaeum*, edited by J. P. Abelin (Franckfurt am Mayn, 1643-46), I, 1089, column a.

²⁰ MSS RAS, *Flottans Arkiv Administrativa Handlingar rörande Örlogsflottan*, A-1, Sect. E., Doc. 2, Folder 2 "Instructioner för Her Carl Carellson Riks Admiral;" MSS RAS, *Flottans Arkiv. B-2, Amiralitets kollegii arkiv: Förslag, 1628-29, Inventerings listor*, "Soldater ombord flottan, månadskost," List No. 2; MSS RAS, *Riksregistraturet 1628*, esp. fol. 11 (new pagination), Pillau, May 19, 1628.

²¹ MSS RAS, *Oxen. Coll., A-1. Skrivelser till Axel Oxenstjerna*, Paul Friedeborn to Axel Oxenstjerna, Stettin, April 17, 1628.

Jörgen Bönhart to Stralsund with two tons of powder, and the dissolution of the Danish-Swedish alliance began.²²

This feeble Swedish aid does not seem to have interfered in any way during the next few weeks with the defense of the town by its own forces and by the troops Christian IV poured into its trenches. By June 15 twelve hundred infantrymen, fifty artillerymen, eight field guns, and a mortar had been landed by the Danes, and a dozen Danish vessels helped to guard the harbor.²³ But no Danish diplomat visited the town and no accord between the city and its Danish helper had yet been signed when a Swedish auxiliary force sailed into the harbor.

Gustavus II Adolphus had spent scarcely a week in Prussia when he moved to fulfill his obligations to his Danish ally. Vice-Admiral Klas Fleming was ordered to take eight chosen vessels from the blockading fleet off Danzig, embark four companies, 600 strong, of veteran soldiers under Lieut.-Col Fritz Rosladin, and sail for Denmark. A week later the threatening situation at Stralsund forced the diversion of the squadron to its defense, and early in June Fleming sailed for that city with 8 vessels, 600 soldiers, and 521 sailors. He went to aid the Danes, but with him was the wily Philip Sadler, empowered to contract an alliance with Stralsund and to bring the city as far as possible under the control of his able and aggressive master.²⁴ The ships and men arrived off its wharves on June 20/30, 1628, and found that the Danish commander, Colonel Holk, had left for Copenhagen two days before to bring back more men and to celebrate his wedding. Within three days Sadler had signed with the city a treaty for twenty years that definitely restricted its independence. Stralsund had accepted aid from Christian IV as an equal, but, under this new pact, it recognized Gustavus II Adolphus as its guardian and protector.²⁵

Twice within the next fortnight Danish succor arrived, fifteen hundred men in all; and on July 16 came fourteen companies of Swedish

²² Axel Oxenstjerna, *Skrifter och Brevväxling* (Stockholm, 1888-), Series II, Vol X (edited by P. Sonden, 1900), No 57, pp 98-99, May 5, 1628; No 58, pp. 108-109, May 7, 1628, No 59, pp 109-111, soon after May 6, 1628. All letters of Karl Karlsson Gyllenhjelm to Axel Oxenstjerna sent from Danzig Roads.

²³ Fock, *op cit.*, VI, 220, 226-27, Nils Slangé-Hans Gram, *Den Stormægtigste Konges Christian den Fierdes Historie* (Copenhagen, 1749), pp 622-623.

²⁴ MSS RAS, *Riksregistraturet 1628*, fol. 30-32, Memorial for Klas Fleming, Löwery, den 26te mai, 1628; fol 35-37, Instruktion for Philip Sadler, Marienburg, den 2de juni, 1628.

²⁵ For the full text of the treaty, see *Sverges Traktater med frammande Makter*, Vol V, Part I, 1572-1632, edited by O. S. Rydberg and Carl Hallendorff (Stockholm, 1905), pp 342-43, No 33, Stralsund. For the date, see Bär, *op. cit.*, p 29.

infantry under Colonel (later General) Alexander Leslie and Colonel Nils Brahe.²⁴ The Swedish force, significant in itself though it was, was overshadowed by the armament gathered by Christian IV and now hovering off Rügen. This was so threatening to the besiegers that Wallenstein ordered von Arnim to break up the leaguer and prepare to meet a Danish landing elsewhere. On July 24, 1628, the Danish king withdrew Colonel Robert Monro and some five hundred Scotchmen from his force at Stralsund for active service with his fleet. A day or two later his armada began to land troops at Wolgast for an attack upon the Imperialist position in Pomerania. The siege of Stralsund was over.

The importance of Christian IV's campaign in Pomerania during July and August of 1628 seems to the author to have been underestimated. To the Danish monarch the Swedish ships and men sent to Stralsund could not have been entirely welcome. Nor could their diplomatic success have been any more pleasing. Sadler and Bönhart, Rosladin and Leslie, Fleming and Brahe had achieved under the new agreement one of the very things that Christian had hoped that the alliance would prevent. The Swedes were in Germany, allied to a German city, and endowed with recognized rights and privileges as co-belligerents. They were as yet on the defensive, but could change to the offensive quickly enough unless the *sedes belli* open to them were occupied by the forces of another Protestant ruler.

Two areas of action lay open to the Danish king. He could direct his troops toward the reconquest of his former holdings—Jutland, Schleswig and Holstein—an objective probably within his powers, but in no sense an objective that would, even if achieved, exclude competition from the German arena. Or he could send his men into action along the line of the Oder, attacking through Pomerania the flank of the Imperialist army in Mecklenburg and Holstein. Success here would make impossible any German expedition on the part of Gustavus II Adolphus. For his troops in Stralsund there would remain only the drudgery of garrison duty while Christian's regiments swept the area east of the Elbe clear of Catholic foes.

The ability of Christian IV to checkmate Gustavus did not correspond to the clarity with which he saw how it could be done. He prepared the expedition with the utmost care. He gathered for this

²⁴ MSS. RAS, *Militie-Råhninger 1633-2*, Designatio & efterskrefne Svenske Krigsfolk som till Tyskland på åtskillige tider utdraget är; Fock, *op. cit.*, VI, 274.

campaign Denmark's last offensive resources and wagered all in expectation of success. Late in July he landed at Wolgast some 1500 cavalry and about 7000 infantry from 170 ships of all descriptions, and covered his camp with the fire of a great pram, three other war-ships, and two galleys.⁸⁷ Here his technical successes ended, for he lacked the time-sense and the daring with which Gustavus might have executed this design. For three weeks he did nothing against von Arnim's open flank, and meanwhile Wallenstein showed his superiority as tactician and strategist. Swiftly concentrating his forces, in three days of hard fighting from August 22 to 24 he drove the Danes out of Wolgast and forced them to re-embark with the loss of 1200 dead, hundreds of wounded, and 1100 prisoners, many of whom took service in his regiments.⁸⁸

The throw of the iron dice had gone against Christian IV, and he had not the wherewithal to play again. The mercenary soldiers of that day did not relish service under an unsuccessful leader, and within a few weeks three of his cavalry colonels were negotiating with Gustavus II Adolphus for the transfer of their regiments to Prussia and Swedish allegiance.⁸⁹ Twenty-four companies of heavy cavalry left for Elbing in spite of Christian's remonstrances, and his infantry regiments were so disorganized that he had to muster some out of service and recruit others in camp on the Danish islands. He was no longer in a position to make pretense of equality to Sweden in arms or diplomacy, and Gustavus soon found means to make this evident to the world.

IV.

Axel Oxenstjerna, Chancellor of Sweden, had never forgotten the dismal day in January, 1613, when he had been forced to sign at Knäred the treaty which closed the Kalmar War, a treaty greatly to the advantage of Christian IV. It was therefore with very pleasant anticipations that he accepted the commission from his king to bring Stralsund's relations to Sweden into accord with the ideas of Gustavus, and the further task of securing the consent of the Danish king to such arrangements. The city came into the control of the Swedish crown *securiter et realiter* by an agreement signed on August 28, 1628, and

⁸⁷ MSS. RAS, *Oxen Coll., A-1: Skrifvelser till Axel Oxenstjerna*, Philip Sadler to Axel Oxenstjerna, Stralsund, 8 augusti, 1628, gives figures which I have accepted.

⁸⁸ Fock, *op. cit.*, VI, 285-292.

⁸⁹ Julius Mankell, *Öfversigt af Svenska Krigshistoriens vigtigaste händelser* (Stockholm, 1865), p. 68.

a secondary official act of September 2 regulated the defense of the port. Under the latter the city promised to appoint a naval commander to command all the naval forces in the harbor, but to be under the orders of the leader of the Swedish garrison.³⁰

Proceeding to Copenhagen, the Swedish diplomat brought the Stralsund situation up for discussion with Christian IV. The Danish king might with justice have complained that he had not been included in Sweden's pact with the city, to which Oxenstjerna probably would have replied that this was not a treaty with opponents, but with friends—a case not covered by the alliance of 1628. The Danish monarch nursed a shrewd suspicion that the Swedes intended to crowd him out of the city, but when the astute Oxenstjerna placated him on this point an agreement was reached quickly. Denmark was to keep three hundred men in Stralsund, but the Swedes were to furnish the rest of the garrison. In their hands lay the nomination of the commanding officer.³¹ In the spring of 1629 the Danes withdrew their garrison and relinquished entirely their hold upon the city.³² To them it would naturally seem that the treaty of alliance was being interpreted to their disadvantage, and they felt justified in negotiating as they pleased with the common enemy for a treaty of peace that would make it unnecessary.

Accordingly, Danish ambassadors met the envoys of Wallenstein at Lubeck early in 1629 to discuss terms of peace between the Empire and Christian IV. News of the negotiations soon reached the ears of Gustavus II Adolphus, and Sweden at once dispatched Karl Banér, Johan Sparre, and Johan Salvius to act as her plenipotentiaries at the conference.³³ Wallenstein asked that the Pope, Spain, Lorraine, and others should be admitted to sign what Austria signed; and Christian demanded that Sweden, Holland, England, and France should take part on his side, either through their envoys or as signatories. The result was a stalemate which threatened the making of any peace. Under pressure from Wallenstein a solution was reached which contra-

³⁰ Oxenstjerna, *Skrifter och Brevveksling*, Series I, Vol. IV, p. 211, Nr. 155, Letter to City of Stralsund, August 28, 1628 and p. 217, Nr. 159, Accord with Stralsund, September 2, 1628.

³¹ MSS RAS, *Danica-VII, Diplomata: Danska Handlingar, 1523-1661* [Danish Papers, 1523-1661], copior af traktater, m. m., fol. 894-896, *Sveriges Traktater*, Vol. V, Part I, pp. 345-357, Nr. 34, Convention with Denmark, Sept. 17, 1628, Copenhagen.

³² Fock, *op. cit.*, VI, 515-516.

³³ MSS RAS, *Riksregistraturet 1629*, Instruktion for Banér, Sparre och Salvius, den 26te januari, 1629.

vened the Swedish-Danish Pact of 1628. All other powers were to be disregarded in the negotiations. Austria on the one hand and Denmark on the other might, however, invite their allies and co-belligerents to subscribe to the final treaty if they so desired, thus in a sense guaranteeing an act to which they had not assented. As a result of this decision, the Swedish envoys were not allowed to present their credentials, nor in any way to influence the making of the treaty of peace.²⁴

Under such conditions Wallenstein was able to dominate the secret sessions that gave rise to the Peace of Lübeck. Christian IV found his foes most generous. He renounced the ecclesiastical lands and dignities held by his sons, and promised not in the future to interfere in the affairs of the Empire. But Jutland and Schleswig were restored to him and Holstein as well, to be held as before as a fief of the Empire. No indemnity was asked of him, and he might invite his allies to sign the treaty as guarantors.²⁵

The signature of Christian IV's envoys was appended to the Peace of Lübeck on June 5, 1629, and with this act closed not only the Danish phase of the Thirty Years' War but also the short and troubled history of the Danish-Swedish alliance. Only fourteen months of the three years had elapsed, and the offensive-defensive pact, with Denmark no longer a belligerent power, had ceased to serve the ends sought by Christian IV and Gustavus II Adolphus. Why and how had this come about?

For Sweden the pact was defensive as far as the Baltic was concerned, but the diplomats in Stockholm felt that Sweden's new superiority over Denmark could be expressed in any field of action Sweden saw fit to choose as *sedes belli*. In Christian's eyes the agreement pre-

²⁴ *Acta et literae ab ult. die Febr. anno 1629 usque ad ult. diem Octob. anno 1630 inter Ser. man. R. am. M. tem Sueciae ejusdemque ministros ab una, et Caesarem Ser. ique Imp. Rom. Electores nec non aliquot Caesareos officiales ab altera parte commutatas* (Stralsund, 1631), prints the documents. Of these, Dietrichstein, Grönsfelt, Walmerode, and Ruepp to Salvius, Lübeck, March 20, 1629, is the most important.

²⁵ *Danmark-Norges Traktater*, IV, 38 ff. There is no authoritative work on the Peace of Lübeck yet written. The most exhaustive work in German is a doctoral dissertation by E. Wilmanns, *Der Lübecker Friede, 1629* (Bonn, 1905). The best short Danish account is Volume I of J. A. Fridericia, *Danmarks ydre politiske Historie i Tiden fra Freden i Lybek til Freden i Kjøbenhavn, 1629-1660* (Copenhagen, 1876). The Swedish contribution is detailed in N. Ahnlund, *Gustaf Adolf inför Tyska Kriget* (Stockholm, 1918), esp. pp. 75-79, 127-148, and 177-183.

served the western Baltic from Swedish as well as from Austrian intrusion. Because ideas so variant were strongly felt but unexpressed, the pact was no sooner made than it was in danger of destruction. The first blow to it was not the Swedish aid to Stralsund, but the treaty with that city, signed without reference to the interests of her Danish ally. The disaster at Wolgast led to the surrender at Copenhagen of the Danish claim to priority in Pomerania. From that it was but a step to the secret negotiation at Lübeck and the dissolution of the alliance.

BYRON'S INTEREST IN THE AMERICAS

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Though pantisocracy is familiar to the elementary student of the romantic period, Byron's more mature interest in the Americas has never received more than brief mention. It can hardly be maintained that his concern with things transatlantic was ever very deep, yet the enthusiastic allusions in his poetry, letters, and journals raise some questions worth considering. What conception did Byron, the cosmopolitan liberal, have of the young United States and the troubled Spanish colonies? What sources of information were available to him? How was it that from 1818 to 1822, when he thought of emigrating, it was to South America rather than to the United States or to British colonies, that he planned to go? To answer these questions as definitely as evidence permits will throw some additional light on Byron's career. To some extent, too, Byron's interest in the Americas was representative of his time and of his class; hence the sources of his knowledge have a wider significance.

Poetically, "America" was with Byron practically a synonym for the United States. The principal allusions are found in the "Ode to Napoleon" (1814), the "Ode on Venice" (1818), *Childe Harold IV* (1818), *Don Juan* (1818-23), and *The Age of Bronze* (1822-23). Dates, however, seem to have little significance, as all references are general and are casually introduced. Arranging them rather by topic, we find that they represent a conventional idealization of "the land of the free and the home of the brave." Washington is a particular favorite with Byron. The earliest reference, though for some reason not published during Byron's life, is found in the full text of the "Ode to Napoleon." Considering Napoleon's abdication a weakness of character, Byron points to Washington as the ideal great man:

Where may the wearied eye repose
When gazing on the Great;
Where neither guilty glory glows,
Nor despicable state?
Yes — One — the first — the last — the best —
The Cincinnatus of the West,
Whom Envy dared not hate,
Bequeathed the name of Washington,
To make man blush there was but one!¹

¹ *The Works of Lord Byron, Poetry*, ed. E. H. Coleridge (London, 1900), III, 314. See editor's "Introduction" for the history of the poem.

Similarly in *Childe Harold IV*, Washington is alluded to as a nonpareil, a "natural man" such as Europe can no longer produce:

Or must such minds be nourished in the wild,
Deep in the unpruned forest, midst the roar
Of cataracts, where nursing nature smiled
On infant Washington? Has Earth no more
Such seeds within her breast, or Europe no such shore?¹

In *Don Juan*, Washington is linked with Leonidas of Sparta as a leader of "Freedom's battles"; their "every battle-field is holy ground."² Further on in the same poem Byron praises the pure motive of the hero:

George Washington had thanks, and nought beside,
Except the all-cloudless glory (which few men's is)
To free his country. . . .³

In *The Age of Bronze* Washington is "a watchword" to lovers of freedom, a "tyrant-tamer" whose spirit is a rebuke to the Congress of Verona.⁴

In the same idealizing strain are the references in *The Age of Bronze* to Franklin,

Calming the lightning . . .
Or drawing from the no less kindled earth
Freedom and peace to that which boasts his birth. . .

and to Patrick Henry, "the forest-born Demosthenes, Whose thunder shook the Philip of the seas."⁵ In *Don Juan*, representative of the happy freedom which the patriots defended, is "General Boon, backwoodsman of Kentucky"; "Crime came not near him—she is not the child of solitude," and "Health shrank not from him."⁶ Coming to events of his own time in the "Ode on Venice" (1818), Byron celebrates American naval victories in the War of 1812:

Still one great clime, in full and free defiance,
Yet rears her crest, unconquered and sublime,
Above the far Atlantic! — She has taught
Her Esau-brethren that the haughty flag,

¹ *Childe Harold IV*, xcvi; *ibid.*, II, 401.

² *Don Juan* VIII, iv-v, *ibid.*, VI, 331.

³ *Don Juan* IX, viii; *ibid.*, VI, 376.

⁴ *The Age of Bronze*, II 249, 388; *ibid.*, V 554, 561. The Congress of Verona, held in October, 1822, was called to deal with questions arising out of the proposed French intervention in Spain.

⁵ *The Age of Bronze*, II 246-8, 384-5; *ibid.*, V, 554, 560.

⁶ *Don Juan*, VIII, lxi-lxvii; *ibid.*, VI, 348-51.

The floating fence of Albion's feeble crag,
May strike to those whose red right hands have brought
Rights cheaply earned with blood.*

Other poetic allusions to the United States are relatively unimportant,⁹ and we may pause to consider how seriously Byron meant the foregoing rhetorical gestures. That they were convenient to a poetical Whig, and natural to a lord who leaned frequently toward Rousseau, is obvious. But did Byron believe them? Did he, in short, believe in Democracy? It is, of course, a phase of the general question: was he sincere; did he believe anything? To this no categorical answer may be given, but the allusions in his letters and journals are at least more specific and straightforward. Let us see what light they throw upon the stock epithets of the poetry.

On November 24, 1813, we find Byron reflecting on the state of the world as follows:

After all, even the highest game of crowns and sceptres, what is it? *Vide* Napoleon's last twelve-month. . . here we are retrograding to the dull, stupid old system. . . Give me a republic, or a despotism of one, rather than the mixed government of one, two, three. A republic! — look in the history of the Earth — Rome, Greece, Venice, France, Holland, America, our short (*ehew!*) Commonwealth and compare it with what they did under masters. . . To be the first man — not the Sylla but the Washington or the Aristides — the leader in talent and truth — is next to the Divinity Franklin, Penn, and, next to these, either Brutus or Cassius — even Mirabeau — or St. Just.¹⁰

As is frequently true with revolutionaries, it is easier to see what Byron is revolting against than what he is hoping for. He seems to confuse dictatorship with democracy. Three months later (February 18, 1814) he hopes Napoleon will win, and at the same time praises republican government:

* "Ode on Venice," ll 142-48; *ibid.*, IV, 197-98.

⁹ They are of interest only as they give further indication of Byron's familiarity with history and current affairs. There are references to Wolfe, Burgoyne, Howe, and La Fayette (*Don Juan* I, ii, iii, *Poetry* VI, 12); to Washington and Franklin in *The Vision of Judgment* (*Poetry* IV, 516); to the War of 1812, "New wars because the old succeed so well" (*The Wals*, 1813; *Poetry*, I, 496); to "General Fireface," Sir George Prevost, British commander in that war (*Don Juan* XIII, lxxxviii; *Poetry*, VI, 508); and the squib on Tom Paine (*Poetry*, VII, 65). In writing *The Corsair* Byron had in mind details of the American pirate La Fitte (*Poetry*, III, 296-8); and some details of the shipwreck in *Don Juan* appear to have been drawn from accounts of the wrecks of American vessels (*Poetry*, VI, 103).

¹⁰ *The Works of Lord Byron, Letters and Journals*, ed. R. E. Prothero (London, 1899), II, 339-40. Clarkson's *Memoir* of Penn was reviewed in the *Edinburgh* of July, 1813.

What right have we to prescribe sovereigns to France? Oh for a Republic! . . . The greater the equality, the more impartially evil is distributed, and becomes lighter by the division among so many — therefore, a Republic!¹²

These two passages Byron wrote before any of the poetical tributes to America. Turning to the letters and journals of 1821-23, we find a number of pertinent remarks written either after or contemporary with the conventional praise. Best known is the prophecy of the "Diary," January 13, 1821:

The king-times are fast finishing There will be blood shed like water, and tears like mist; but the peoples will conquer in the end, I shall not live to see it, but I foresee it.¹³

A week previously he had recorded that the Neapolitans would win their struggle for liberty if they could but find a leader:

Holland in worse circumstances, beat the Spains and Philips; America beat the English; Greece beat Xerxes, and France beat Europe, till she took a tyrant; South America beats her old vultures out of the nest. . . .¹⁴

In "Detached Thoughts" of the same year he reiterates that it is "but a word and a blow," and points to the example of England "formerly," and to France, Spain, Portugal, America, and Switzerland.¹⁵ Earlier in the year he set down his belief that the future lies with "the new English and Spanish Atlantides."¹⁶

In all these remarks, faith in a republican government is implied, but there are two more definite affirmations. On October 12, 1821, Byron wrote to Hobhouse about the part he would take in politics if he came home:

I certainly lean towards a republic. All history and experience is in its favour, even the French; for they butchered thousands of citizens at first, yet *more* were killed in any one of the great battles, than ever perished by a democratical proscription. America is a model of force, and freedom, and moderation; [in spite of] all the coarseness and rudeness of its people.¹⁷

Shortly afterward in "Detached Thoughts" he concludes:

There is nothing left for mankind but a Republic, and I think that there are hopes of such The two Americas (South and North) have it; Spain and Portugal approach it; all thirst for it Oh Washington!¹⁸

¹² *Ibid.*, p. 384.

¹³ *Ibid.*, V, 173.

¹⁴ *Ibid.*, V, 188-89.

¹⁵ *Ibid.*, V, 451.

¹⁶ *Ibid.*, V, 416-17.

¹⁷ *Lord Byron's Correspondence*, ed John Murray (London, 1922), II, 204.

¹⁸ *Letters*, V, 462.

In these eight passages between 1813 and 1821 it is not Childe Harold, but the man Byron who speaks. We are led to think that there was something, after all, behind the facile epithets of the poems. If Byron did not believe in democracy and its patriots, he tried hard, and succeeded as well as he ever succeeded in believing anything. That it was a struggle is evidenced by the following from "My Dictionary," dated May 1, 1821:

It is still more difficult to say which form of government is the *worst* — all are so bad. As for democracy, it is the worst of the whole; for what is (*in fact*) democracy? An Aristocracy of Blackguards.¹⁹

Even when he most strongly voices his faith in republics and their accomplishments, it is easy to see his aristocratic reservations. He is first of all against the present rulers of Europe; beyond that, he sees that in his own time the opposition, the forces of democratic revolt, have brought forth a more dashing type of leadership. Such leadership he is willing to invest with kingly powers. This belief in the individual of talent lies back of his admiration for Napoleon; linked with Rousseauistic veneration of "the natural man," it explains his idealization of Washington and the republic which he founded.

These brief references suggest that the American republic was only vaguely familiar to Byron, but there is much reason to think otherwise. In Byron's circle were many who knew America at first hand. Even in his own family there were several direct contacts that would at least have stimulated an interest in transatlantic affairs. His father, John Byron, "entered the guards and served in America,"²⁰ apparently before the Revolution. Lord Carlisle, his guardian, "was the chief of three commissioners sent out by Lord North to negotiate with the United States."²¹ And Byron's cousin, Sir Peter Parker, was killed in 1814 in the action near Baltimore.²² Among Byron's friends were Moore, whose published opinions of America we shall examine later; R. C. Dallas, who was born in Jamaica in 1754 and, after his education in Scotland, made two trips across the Atlantic before Byron knew him²³; Edward Ellice (1781-1863), who inherited estates in New York

¹⁹ *Ibid*, V, 405-6. The quality and limits of Byron's republicanism are interestingly discussed by Crane Brinton in *The Political Ideas of the English Romanticists* (Oxford U Press, 1926), pp. 148-63.

²⁰ *Letters*, I, 3.

²¹ *Ibid*, I, 37n.

²² See Byron's "Elegiac Stanzas on the Death of Sir Peter Parker," *Poetry*, III, 417-19.

²³ *Letters*, I, 168n.

and Canada, and in 1803 made the first of many trips across the Atlantic²²; and Monk Lewis, whose meeting with Byron in Switzerland came just between his two trips to Jamaica.²⁴

Much more important, of course, was Byron's association with Americans traveling in Europe. His spectacular popularity made him much sought after by transatlantic admirers, and his own delight in American acclaim made him hospitable to those who wished to see him. "To be popular in a rising and far country," he wrote in 1813, "has a kind of *posthumous* feel. . . ." ²⁵ In 1821 he was of the same opinion:

Whenever an American requests to see me (which is *not* unfrequently), I comply: firstly, because I respect a people who acquired their freedom by their firmness without excess; and, secondly, because these transatlantic visits, "few and far-between," make me feel as if talking with posterity from the other side of the Styx.²⁶

It is possible that Byron met Dallas' nephew, "son to the American attorney-general," for he refers to him in 1813.²⁷ If not, his first American visitor of importance seems to have been George Ticknor, in 1815. Ticknor, then a young man of twenty-four, gives this account of the meeting:

[Byron] talked, of course, a great deal about America; wanted to know what was the state of our literature, how many universities we had, whether we had any poets we much valued, and whether we looked on Barlow as our Homer. He certainly feels a considerable interest in America, and says he intends to visit the United States; but I doubt whether it will not be indefinitely postponed, like his postponed trip to Persia.²⁸

Byron met and admired John Howard Payne,²⁹ and perhaps met the poet Halleck, who carried a letter of introduction to him when he went abroad.³⁰ In 1817 and 1818 we hear of American acquaintances

²² DNB.

²³ *Letters*, II, 315n.

²⁴ *Ibid.*, II, 360 He goes on to mention his pleasure at American praise of *English Bards*. December 27, 1813, he requested Murray to obtain copies of an American edition of the poem (*Letters*, II, 312)

²⁵ *Ibid.*, V, 416.

²⁶ *Ibid.*, II, 360 Alexander James Dallas, younger brother of R. C. Dallas, was United States attorney in eastern Pennsylvania, and later Secretary of the Treasury. The son, George Mifflin, was on his way to Russia in 1813, as secretary to the ambassador. Later George Mifflin Dallas became Vice President, and afterwards ambassador to England.

²⁷ Quoted by Robert E. Spiller, *Americans in England* (New York, 1926), p. 61.

²⁸ *Ibid.*, p. 267. This was probably during 1813-15, when both Byron and Payne were interested in the Drury Lane Theatre.

²⁹ *Ibid.*, p. 259.

whom Byron does not mention by name,⁸¹ and in 1821 he is delighted by a visit from "a Mr. Coolidge, of Boston," a friend of Irving. He wrote of the meeting to Moore,⁸² and several months later referred to it again in "Detached Thoughts":

I confess I was more flattered by this young enthusiasm of a solitary transatlantic traveller, than if they had decreed me a statue in the Paris Pantheon.⁸³

In 1822 Byron was entertained on board the American squadron then at Pisa. Of this he wrote enthusiastically to Murray and to Moore, and again several months later to Kinnaird; he comments to Murray:

. . . I was received with all the kindness which I could wish, and with *more ceremony* than I am fond of. . . . Captain Chauncey showed me an American and very pretty edition of my poems, and offered me a passage to the United States, if I would go there. Commodore [Jacob] Jones was not less kind and attentive.⁸⁴

On board the *Constitution* young Bancroft, then traveling in Europe, was presented to him, and the next day called on the poet. Bancroft wrote a friend that he "was treated by him with more civility than I have ever been by any man in Europe." From Bancroft's journal we have the following:

At first he asked me many questions about the fleet, about our officers, our ships, and our battles. He seemed even informed of the duels. . . knowing the names of the parties and the particulars of the quarrels. We did not talk long on these matters, but came upon literature.

He spoke of several countrymen Of Ticknor, of Everett, of Coolidge. He spoke particularly of W. Irving whose *Knickerbocker* he seemed very fond of.

Lord Byron wishes to go to America. He could judge it impartially till now none had been there but spectators. he would go unprejudiced; at least without prepossessions for his Mother country.⁸⁵

⁸¹ *Letters*, IV, 177; *Correspondence*, II, 68.

⁸² *Letters*, V, 318.

⁸³ *Ibid.*, V, 421.

⁸⁴ *Ibid.*, VI, 72. The letters to Moore and Kinnaird are found *ibid.*, pp. 81, 140-41. The letter to Murray is dated from Montenero, May 26, 1822; that to Kinnaird (it is uncertain that he was the addressee) from Genoa, November, 1822. Similarities in phrasing would suggest that these two letters were written only a few days apart. Trelawny, *Recollections of the Last Days of Shelley and Byron* (London, 1923), pp. 55-56, describes Byron's visit to another American ship.

⁸⁵ M. A. DeWolfe Howe, *The Life and Letters of George Bancroft* (New York, 1908), I, 147-51. The Everett mentioned was probably Edward Everett, who studied and traveled in Europe, 1815-19.

Shortly afterward Byron sat for his portrait to West, the American artist, "and asked a multitude of questions about America. . . . He seemed at a loss where to go, and was, I thought, on the point of embarking for America."⁸⁶ In the spring of 1823 he was equally curious about America when he received a young Virginian:

Is Jefferson alive? Is it true that your landlords are all colonels and justices? — Do you know Washington Irving? . . . Have you any American books to lend me? — I am very desirous of reading the "Spy". Is it true that an Englishman is always insulted in travelling through America?

And again he stated his intention of visiting America, giving as a mock-serious comment, "Your morals are purer than those of England."⁸⁷

In his meetings with these ten or more Americans, Byron showed unfailing hospitality and a keen, good-humored interest in the new Republic. With his eager curiosity and retentive memory, Byron, we may be sure, made good use of these interviews and associations. Yet the accounts we have are very sketchy. If we wish to inquire more definitely what he knew and how he thought about America, we shall have to consult the books of the time which were available to him. In the great mass of his correspondence and the other biographical data the best clue is the mention in the memorandum of 1807 that he had read "Andrews American War."⁸⁸ John Andrews' *History of the War with America, France, Spain, and Holland commencing in 1775 and ending in 1783* is now apparently little known,⁸⁹ and some description of it is necessary to make clear Byron's knowledge of the American Revolution. Published in 1785, Andrews' *History* was probably the first full-length account in England of the war with the colonies. Moreover, it purported to be an "official" account, for we read on the title page,

⁸⁶ Moore, *op cit*, V, 343-46.

⁸⁷ *The Life, Writings, Opinions and Times of . . . Byron*, London, 1825, III, 21-22. Whoever the anonymous author of this curious work, he professed to have been for many years a close friend of Byron and included "recollections" of the destroyed biography. Details of the "Virginian's" interview are represented as coming in a private letter to the author himself. He immediately refutes Byron's praise of American morals, claiming to have lived in America for several years.

⁸⁸ Thomas Moore, *The Works of Lord Byron, with his Letters and Journals, and his Life* (London, 1832), I, 142.

⁸⁹ There is no reference to it in Charles Gross, *Sources and Literature of English History* (London, 1900), nor in Channing, Hart and Turner's *Guide to the Study and Reading of American History* (New York, 1912). J. N. Larned's *Literature of American History* (Boston, 1902), p. 114, describes the work as "one of the most detailed accounts written by any Englishman," and says that it shows "marked impartiality."

"Published by His Majesty's Royal License and Authority." ⁴⁰ Judged by his performance, Dr. John Andrews was an able and independent student of affairs.⁴¹ His "Introduction," to be sure, states a thesis comforting to George III: that the American Revolution was primarily the result of French intrigue in revenge for the loss of Canada in 1763. The text, however, shows a far deeper understanding of the factors which developed in Americans the vigorous resistance to English government. There is something of Burke's earlier emphasis of the native English passion for self-government, the tradition of struggle for religious liberty, the legal training, and the thriving commerce as causes of the Revolution; but these arguments are newly and more fully developed by Andrews.

Beginning with "The Stamp Act and Its Consequences," the first of the four volumes is wholly occupied with the causes and negotiations which led up to the hostilities. Succeeding volumes carry on the story, shifting skillfully from north to south, to the West Indies, to Canada, to Europe, and even to Asia, as events in America become related to English policy in other parts of the world. Frequent chapters entitled "Transactions," based on Parliamentary debates and other government documents, some from the colonies themselves, form a valuable and interesting background to the military events described. Though a *quasi* "official" historian, Andrews finds opportunity for many a passage on liberty which must have made the blood run faster in young Byron's veins. Regarding the Congress of 1774, we find the following:

They who wondered at the daringness of the Americans, did not reflect, that their position was precisely such as will always induce men to act in the same manner. They were the descendants of the freest people on earth, whose notions they had imbibed, and whose privileges they claimed in their fullest extent, as their undoubted inheritance. Remote from the seat of power and corruption, they were not overawed by the one, nor debilitated by the other.⁴²

Later in the work Andrews makes this general comment on the significance of human freedom:

⁴⁰ Among the list of subscribers, given at the end of Vol. IV, we find Admiral Byron, Piccadilly; Mr. Jon Byron, Deptford; and Mr. John Murray, Fleet Street.

⁴¹ DNB gives nothing beyond the dates of his life (1736-1809), the titles of five works, and the obituary notice from the *Gentleman's Magazine*. In the latter, Andrews is lamented as "an able historian, a profound scholar and politician, and a man ever ready to take up his pen in his country's cause."

⁴² I, 172.

The truth is that liberty is so truly the clear and incontestable right of mankind, that even they who have never possessed, nor expect ever to possess it, cannot help feeling its value, and the propriety of asserting it in all who have it in their power. . . . Men who are combating for freedom, are in some measure the champions of mankind: they fight, as it were, the universal cause of society.⁴³

Though he does not quote the Declaration of Independence in full, Andrews takes five full pages to summarize it; the preamble is given verbatim, and most of the specific abuses are listed.⁴⁴ There is a review of the debate on the wisdom of declaring independence, and though both sides are ably presented, the implication is strong that the principles are sound and that the circumstances justified the action. Similarly, full treatment is accorded the Articles of Confederation and the treaty of 1783, with which the work concludes.

In the personalities of leaders in the war, Andrew was less interested, and he naturally had less information. Washington, however, does figure prominently enough to emerge as an individual, and the impression is wholly favorable. He is represented as a universal favorite, the unanimous choice as commander-in-chief. His earlier military success is referred to, but "his modesty was equal to his merit":

After accepting of their nomination with unfeigned reluctance, he generously declined all pecuniary emoluments. He earnestly desired every person present to remember that he acknowledged himself unequal to so momentous a charge, and that he undertook it solely in compliance with their positive request.⁴⁵

Far from being a "child of nature," as Byron hints, Andrews tells us that Washington

possessed an affluent fortune, which he enjoyed in a polite and hospitable manner. His disposition was friendly and affable, and his behaviour decent and becoming a man of rank.⁴⁶

The famous letter to General Gage regarding the treatment of prisoners is liberally quoted, and with hearty approval. Washington's fame in Europe is generously acknowledged, and no single detraction is made from it:

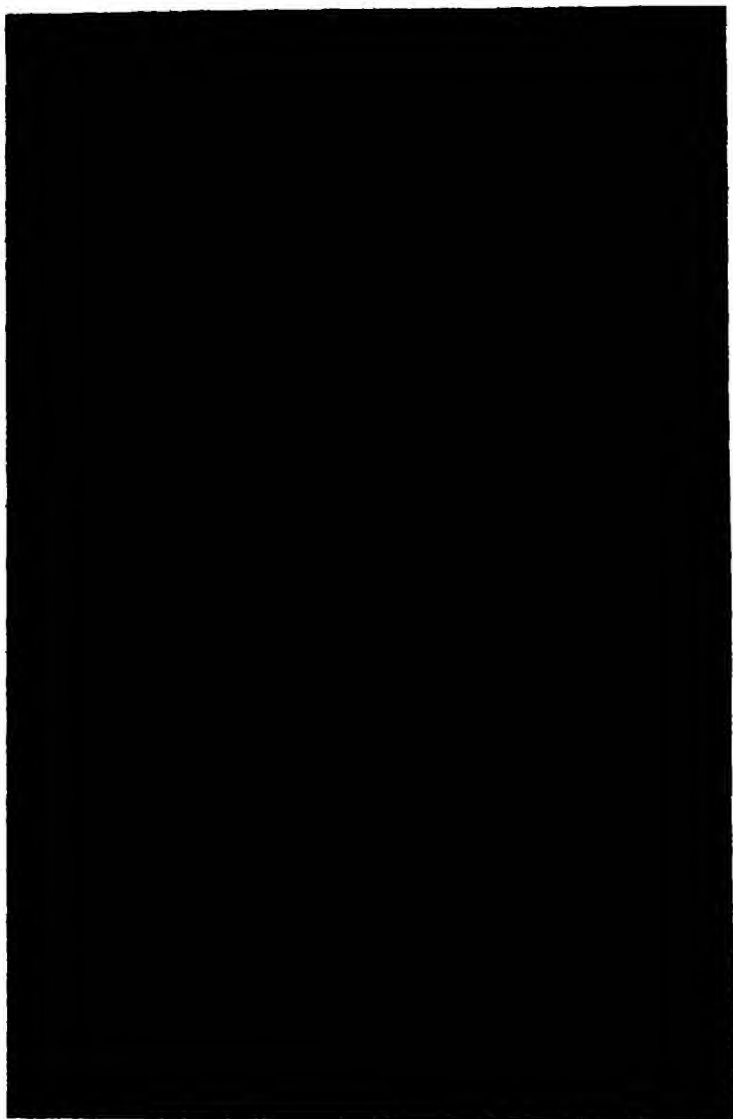
To speak impartially, he fully answered every hope they had formed . . .

⁴³ I, 182-83

⁴⁴ II, 218-22.

⁴⁵ I, 354.

⁴⁶ *Ibid.*



This portrait-bust, an engraving by William Angus, was reproduced in Andrews' *History of the War with America, France, Spain, and Holland* (London, 1785), I, 354. A description of it is given in W. S. Baker's *The Engraved Portraits of Washington* (Philadelphia, 1880), p. 19. Elsewhere in his volume Baker explains that Angus copied the head of Le Mire's engraving (p. 17), which in turn was "a fictitious picture, the head alone after Charles Willson Peale" (p. 25).

he completely justified the opinion the world had entertained of his valour, conduct, and perseverance."⁴⁸

Thus, before he was twenty, Byron had read a circumstantial account of the founding of the American Republic, written by an Englishman, but really sympathetic to the American cause as representative of man's ancient struggle against tyranny. Of that struggle Washington was then the unqualified hero. The basis for idealization was obvious: "Oh Washington!" required only the elimination of detail—no argument was necessary.⁴⁹

In the American Joel Barlow's *Columbiad*, which Byron thought "not to be compared with the works of more polished nations,"⁵⁰ he found—if he read so far—a resumé of American history in conventional rhymed couplets. After four books devoted to South America, Book V turns to the dangers and achievements of the early colonists of the north. There is a sketch of an Indian massacre, reference to the ideals of the colonies of Penn and Baltimore, and to the struggle with the French, including an account of the capture of Quebec. Then come the deliberations of "majestic Randolph, "sage Franklin," "Bold Wolcott," "Adams, enraged," and "Nash, Rutledge, Jefferson, in council great." After Bunker Hill, Washington appears, and

Unnumber'd chiefs around their leader stand

Fired by his voice, and guided by his hand . . .

"Brave Greene," "stern Putnam," and a host of others are catalogued, and among them "Fayette moves graceful, ardent, and sublime."⁵¹ Book VI continues the story and closes with Cornwallis' surrender. The three concluding books deal with the arts of peace—Franklin and Copley, for example, are celebrated—and a prophetic vision of the future of America amid a harmonious and progressive world.

Another clue to Byron's reading about America is furnished by the reference to Daniel Boone in *Don Juan*, mentioned above. For it is practically certain that Byron's allusion was based upon a passage in

⁴⁸ *Ibid*, I, 433-35, 355.

⁴⁹ To Augusta, Byron described Mavrocordato as the only "Washington or Kosciusko kind of man" among the Greeks. A similar comparison occurs in a letter to Moore. *Letters*, VI, 259, 294.

⁵⁰ First published in 1787 as *The Vision of Columbus*, and republished in 1807 as *The Columbiad*. It was rather disparagingly reviewed in the *Edinburgh Review*, XV (October, 1809), 24-40. Byron's note, Moore I, 146, is dated November 30, 1807.

⁵¹ Joel Barlow, *The Vision of Columbus*, second ed. (Hartford, 1787), pp. 151-75.

John Filson's *The Discovery, Settlement and Present State of Kentucky*,⁸¹ first published in 1784, but given "wide circulation in England through its inclusion in the second and third editions (1793, 1797) of Gilbert Imlay's *A Topographical Description of the Western Territory of North America*."⁸² Byron must have found the two small volumes of this composite work a queer mixture of fact, fancy, and political theory. Volume I, which includes all of Imlay's own work, is a series of letters to an English friend, originally intended for publication in the *Morning Chronicle*. The writer is pleased at

an opportunity of contrasting the simple manners, and rational life of the Americans, in these back settlements, with the distorted and unnatural

⁸¹ Of the seven stanzas devoted to Boone, the first two are the most interesting, and they contain the details which parallel Filson most closely

Of all men, saving Sylla, the man-slayer,
Who passes for in life and death most lucky
Of the great names which in our faces stare,
The General Boon, back-woodsman of Kentucky,
Was happiest amongst mortals anywhere,
For killing nothing but a bear or buck, he
Enjoyed the lonely vigorous, harmless days
Of his old age in wilds of deepest maze.

Crime came not near him—she is not the child
Of solitude; Health shrank not from him—for
Her home is in the rarely trodden wild,
Where if men seek her not, and death be more
Their choice than life, forgive them, as beguiled
By habit to what their own hearts abhor—
In cities caged The present case in point I
Cite is, that Boon lived hunting up to ninety;

Don Juan VIII, lxi-lxii, *Poetry* VI, 348-51 In a note E. H. Coleridge quotes the following passage from Filson as the source of Byron's tribute to Boone:

"I [Boone] undertook a tour through the country, and the diversity and beauties of nature . . . expelled every gloomy and vexatious thought. Just at the close of day the gentle gales retired, and left the place to the disposal of a profound calm. Not a breeze shook the most tremulous leaf I had gained the summit of a commanding ridge, and, looking round with astonishing delight, beheld the ample plains, the beauteous tracts below. On the other hand, I surveyed the famous river Ohio, that rolled in silent dignity, marking the western boundary of Kentucky with inconceivable grandeur. . . . All things were still. I kindled a fire near a fountain of sweet water, and feasted on the loins of a buck, which a few hours before I had killed. . . . No populous city, with all the varieties of commerce and stately structures, could afford so much pleasure to my mind as the beauties of nature I found here" (quoted from Imlay, 1793 ed., pp. 51-52). But Byron must have seen some later account of Boone, for he speaks of him living "up to ninety" (actually Boone died in 1820 at eighty-five). R. L. Rusk, *Literature of the Middle Western Frontier* (2 vols., New York, 1926), gives no clue as to a later account save a poem based on Filson (I, 122)

⁸² DAB, II, 442-43. This authority adds: "The seven stanzas that Lord Byron devoted to Boone in the eighth canto of *Don Juan* (1823) made him a world-wide celebrity, and he gradually became the one overshadowing figure of the frontier."

habits of the Europeans: which have flowed from the universally bad laws which exist on your continent, and from that pernicious system of blending religion with politics, which has been productive of universal depravity."¹

After brief speculations on the aborigines, an account of immigration prior to the American Revolution, and of the Indian troubles of 1787, Imlay turns to a description of the wonderful prospects which the western country now holds for the European emigrant. There is much information about crops, minerals, native fauna and flora, navigable rivers, prices of supplies; but occasionally the author soars above these plain matters of fact. Describing the luxuriant bottoms of the Ohio valley, he progresses to the plateaus overlooking the river:

when you would suppose you had arrived at the summit of the mountain, you find yourself upon a extensive level. Here an eternal verdure reigns. . . . Soft zephyrs gently breathe on sweets, and the inhaled air gives a voluptuous glow of health and vigour, that seems to ravish the intoxicated senses . . . Far from being disgusted with man for his turpitude or depravity we feel that dignity which nature bestowed upon us at the creation; but which has been contaminated by the base alloy of meanness, the concomitant of European education. . . . "²

In this wonderful country many "genteel" people are now settling. It is wonderfully easy to grow a garden, and every spring

The season of sugar making occupies the women, whose mornings are cheered by the modulated buffoonery of the mocking bird, the tuneful song of the thrush, and the gaudy plumage of the parroquet. . . . Festive mirth crowns the evening."³

It is small wonder that amid these blessings people dwell in "harmony . . . and equity without litigation."⁴

Volume II is wholly a supplement to Imlay, composed of Filson's "Preface," "The Adventures of Col. Daniel Boone," two documents concerning western Indians, Jefferson's report to the President on western lands available for settlement, and a concluding section entitled "Thoughts on Emigration." Of these, Boone's "Adventures," though obviously not by Boone himself, is the most interesting. In thirty pages are recounted Boone's first trip to Kentucky in the spring of 1769; his capture by the Indians and his escape; the dramatic meeting in the forest with his brother; Boone's solitary year after his

¹ Edition of 1793, I, 25.

² I, 57-58.

³ I, 137.

⁴ *Ibid.*, I, 36.

brother's departure; the move to Kentucky in 1773 with five families of settlers; campaigns against the Shawanese [*sic*]; his capture in 1778 and imprisonment in Detroit; and the battle of Blue Licks in 1782, in which his second son was killed. The style is absurdly inadequate to these adventures; of Boone's meeting with his brother the eighteenth century ghost writer can make the hero comment:

Notwithstanding the unfortunate circumstances of our company and our dangerous situation, as surrounded with hostile savages, our meeting so fortunately in the wilderness made us reciprocally sensible of the utmost satisfaction."

Nevertheless, from the "Adventures" Byron could have gained a fair notion of life in the most stirring period of "the dark and bloody ground." *Don Juan*, however, permitted him only to satirize and sentimentalize.

The *Epistles* of Tom Moore gave Byron a vastly different impression of the United States. Published in 1806, before the two were acquainted, the book was unfavorably reviewed in the *Edinburgh* for July. Since the review was the occasion for the famous duel between Moore and Jeffrey,⁸⁸ it is likely that Byron read it at the time, and if he did not at once proceed to the volume itself his subsequent friendship with the author and his continued interest in the subject would have made the volume inescapable. From the conventionalities of the *Epistles* themselves, indeed, little could have been learned beyond the fact that America had disappointed Moore:

— even now

While yet upon Columbia's rising brow
The showy smile of young presumption plays,
Her bloom is poisoned, and her heart decays!"

He writes first from Norfolk, sketching the idyllic dream of a realm of peace and freedom which he had long cherished. Norfolk has disappointed him, but it is "just the porch to Freedom's fane."⁸⁹ In Washington he again contrasts the dream with the reality: America is pre-tentious, tyrannical in spirit, a medley of "the vilely slaved and madly free."⁹¹ In a second epistle from Washington he pays tribute to the

⁸⁸ II, 50-51.

⁸⁹ *English Bards and Scotch Reviewers*, I. 466; *Poetry* I, 333.

⁹⁰ *The Poetical Works of Thomas Moore*, Albion edition (London, n.d.), p. 142.

⁹¹ *Ibid.*, p. 105.

⁹² *Ibid.*, p. 144.

leader for whom the city is named, but concludes that Americans "cast off their monarch that their mob might reign," misled by "that Gallic garbage of philosophy."⁸³ Later, from Buffalo, Moore writes that America is a land

Where every ill the ancient world can brew
Is mixed with every grossness of the new.⁸⁴

He finds some cause for hope in the "sacred few" (such as Mr. Dennie and his friends of Philadelphia)⁸⁵; and from Halifax he bade farewell to America with these words:

Well—peace to the land! may the people at length,
Know that freedom is bliss, but that honor is strength.⁸⁶

From the Preface to the volume, and from the copious notes, the reader gains more information and considerable guidance for further study of America. "Though prudence might have dictated gentler language, truth, I think, would have justified severer," says Moore; party strife, "the rude familiarity of the lower orders," and "the unpolished state of society in general" are, he thinks, not to be accounted for by simplicity of character and inexperience."⁸⁷ *The American Farmer's Letters* and Imlay's *Account of Kentucky* he dismisses as "romantic works"⁸⁸; together with the accounts of French travelers (such as Brissot), misguided by revolutionary principles, they have spread misconceptions about America. Works which Moore quotes as trustworthy authorities include: Peter Porcupine, Weld's *Travels*, Charlevoix, Hennepin, Mackenzie's *History of the Fur Trade*. Buffon and De Pauw are pointedly mentioned as more credible than Jefferson in his *Notes on Virginia*.⁸⁹

Moore's *Memoirs* record some of his impressions of America, and probably bring us closer to his later conversations on the subject during the years in which he knew Byron. He describes appreciatively the hospitality of Colonel Hamilton, British Consul in Norfolk, but says there is "nothing to be seen in the streets but dogs and negroes."⁹⁰

⁸³ *Ibid.*, pp. 152-53.

⁸⁴ *Ibid.*, p. 169.

⁸⁵ *Ibid.*, p. 170.

⁸⁶ *Ibid.*, p. 187.

⁸⁷ *Ibid.*, pp. 96-97.

⁸⁸ *Ibid.*, p. 105.

⁸⁹ *Ibid.*, pp. 142-43, 151, 166, 181, 152.

⁹⁰ *Memoirs, Journals and Correspondence of Thomas Moore*, ed Lord John Russell (London, 1853), I, 139.

He disliked the mosquitoes, the changeable climate, the "barrenness in intellect, taste, and all in which the heart is concerned."¹⁰ The overland trip from Norfolk to Baltimore disgusted him, and, though he met President Jefferson and the Secretary of State, he was not impressed. Philadelphia was the only place where he found agreeable society, but the scenery of the Hudson, northern New York, and Niagara Falls greatly pleased him. Some Oneida Indians interested him, and he deplored the government's trickery in dealing with the Indians. He celebrated his return to British soil by drinking a bumper to the King and paying tribute to Wolfe at Quebec. In the last days before he sailed from Halifax he spoke much of the courtesy shown him, but nothing in the new world, American or British, led him to plan a return.¹¹

So far as it is recorded, Byron's other reading about the American republic seems scattered and meager. From *Knickerbocker's History of New York* and the *Sketch Book*, of which he was very fond, he knew something of the middle states, and perhaps Irving's essay, "English Writers on America," served to offset Moore's acid comments:

The national character is yet in a state of fermentation; it may have its frothiness and sediment, but its ingredients are sound and wholesome . . . The tissue of misrepresentations attempted to be woven round us are like cobwebs woven round the limbs of an infant giant Our country continually outgrows them"

Byron knew the popular "Gertrude of Wyoming" by Campbell, but had a poor opinion of it:

It has no more locality in common with Pennsylvania than with Penman-maur It is notoriously full of grossly false scenery, as all Americans declare, though they praise parts of the poem"

Robertson's *History of the Discovery and Settlement of America*, listed in the memorandum of 1807, did not extend past the seventeenth century.¹² Andrews' *American War* was thus the back-log of Byron's known reading about America. To it he related the divergent impressions received from Barlow, Imlay, Moore, and Irving.

¹⁰ *Ibid*, p 159

¹¹ *Ibid*, pp 159-74.

¹² Washington Irving, *The Sketch Book*, Bohn ed (London, 1882), pp 36-37 There are numerous references to Irving in Byron; see especially *Letters*, V, 94, 341, 373, 472.

¹³ *Letters*, V, 166.

¹⁴ Moore, I, 142. The two chapters dealing with North America were added after Robertson's death, and may not have been included in the edition Byron read.

An important source of information, hitherto not carefully analyzed, would have been current issues of the *Edinburgh* and *Quarterly Reviews*, in which many books dealing with America were discussed at length. It is true that Byron was out of England from 1809 to 1811, and after April, 1816; but for the earlier period bound volumes would have been available on his return, at Murray's and elsewhere; and during the latter period we know that Murray sent him many issues. It is hardly justifiable to assume that whatever appeared in these journals he certainly read, but it is at least plausible to suppose that when he read and alluded to a particular article or issue, he probably read in the number any articles dealing with America. Now we have in Byron's letters and notes, allusions to thirty-six specific numbers of the *Edinburgh* and twenty-four numbers of the *Quarterly*.¹⁸

¹⁸ These were his favorite periodicals, as may be seen from the index to his *Letters*. It is likely, too, that he saw the *Annual Registers*, which contained summaries of the year's events in the Americas as well as other foreign countries; to judge from his one direct allusion, however, he was no enthusiastic student of these volumes: "I am in such a state of sameness and stagnation . . . trying to read old Annual Registers and the daily papers. . . ." To Moore, March 2, 1815, *Letters* III, 182. Byron appears to have been an inveterate reader of newspapers, and from this source he would have accumulated a mass of miscellaneous information about America, but this lies beyond the scope of the present study—if, indeed, it does not defy analysis. The present study of the *Edinburgh* and *Quarterly* is meant to indicate something of Byron's probable familiarity with the more substantial discussions of America in his own day.

Though articles dealing with America appear in by no means all of the issues of the reviews to which Byron alludes, it will be of some interest to give in order the whole list, so far as I can determine it from the comments in Byron's letters, journals and notes. After the month and year of the issue I give in parenthesis the principal allusion, citing the Coleridge and Prothero editions of the *Poetry* and *Letters*, respectively, or the Murray edition of Byron's *Correspondence*. From the *Edinburgh*, Byron either certainly or probably read the following issues: October, 1802 (Southey had been "abused" by *E.R.*; *Letters*, I, 184-85); July, 1803 (Moore had been "abused" by *E.R.*; *Letters*, 184-85); July, 1804 (Lauderdale had been "abused" by *E.R.*; *Letters*, I, 184-85); January, 1805 (reference to "dull Maurice," whose book on Hindostan had been "cut up" by the *E.R.*; *Poetry*, I, 330); July, 1805 (Aberdeen the reviewer of Gell's *Troy*—Byron's note; *Poetry*, I, 336); October, 1805 (Southey had been "abused" by *E.R.*; *Letters*, I, 184-85); January, 1806 (reference to Hallam's bull on Pindar in review of Knight's *Principles of Taste*; *Poetry*, I, 337); July, 1806 (see above, note 58; Moore's Poems had been "abused" by *E.R.*; *Letters*, I, 184-85); October, 1806 (reference to G. Lambe's review of Beresford's *Miseries*; *Poetry*, I, 338, Byron's note); January, 1807 (reference to review of Montgomery; *Poetry*, I, 330, Byron's note); July, 1807 (reference to review of Little; *Poetry*, I, 202, Byron's note); January, 1808 (review of *Hours of Idleness*); April, 1808 (reference to review of Hodgson's *Juvenal*; *Poetry*, I, 337, Byron's note); October, 1808 (reference to review of Don Pedro de Cevallos; *Poetry*, I, 338); April, 1810 (reference to this issue; *Poetry*, I, 429, Byron's note, and *Poetry*, II, 196, 201); February, 1812 (review of *Childe Harold*); July, 1812 (asks for "a number" of the *E.R.*; *Letters* II, 139); July, 1813 (review of *Glaow*; also reference to articles on Grimm and Madame de Staël; *Letters*, II, 229, 246, 251); October,

In these numbers were reviewed about twenty-five books dealing with North America. That Byron read most of these articles, and that he often turned from them to the books themselves is more than likely. And at the very least, the content of these books, seen through the eyes of Whig and Tory reviewers, gives us a very fair sample of the way cultivated Englishmen thought about America; it gives us the basis of casual reference and informal debate in the conversation of Byron's friends, both English and American.

One of the most interesting articles which Byron is likely to have read is the *Edinburgh's* review of John Marshall's *Life of Washington* and David Ramsay's virtual abridgement of it. This appeared in October, 1808,⁷⁸ when Byron was twenty; probably, therefore, he had read Andrews' *American War* not long before. The reviewer, after lamenting the comparative lack of personal details about the character of Washington, devotes most of his space to summarizing the hero's

1813 (reference to review of Rogers; *Letters*, II, 350-51); January, 1814 (refers to it by number, 44; *Letters*, II, 403); April, 1814 (review of *Corsair* and *Bride of Abydos*; *Letters*, III, 123); September, 1814 (Moore a contributor; *Letters*, III, 123); November, 1814 (Moore a contributor; *Letters*, III, 168); June, 1816 (reference to article; *Letters*, V, 102); December, 1816 (review of *Childe Harold* III); August, 1817 (review of *Manfred*; *Letters*, IV, 173); November, 1817 (reference to article on Junius; *Letters*, IV, 210); February, 1818 (review of *Beppo*); June, 1818 (review of *Childe Harold* IV; *Letters*, V, 408); January, 1820 (mentions receipt; *Letters*, V, 52); May, 1820 (mentions receipt; *ibid*); August, 1820 (review of Keats; *Letters*, V, 109); July, 1821 (review of *Marino Faliero*); October, 1821 (mentions receipt; *Letters*, V, 488); February, 1822 (review of *Sardanapalus*, *Foscari*, and *Cain*; *Poetry*, V, 338); February, 1823 (review of *Heaven and Earth*).

Of the *Quarterly* it is certain or probable that Byron saw the following issues: March, 1812 (review of *Childe Harold*); June, 1812 (reference to review of *Life of Horne Tooke*; *Letters*, II, 180); March, 1813 (reference to review of Rogers' *Columbus*; *Letters*, II, 218-19); July, 1813 (reference to review of Wakefield and Fox *Correspondence*; *Letters*, II, 381); October, 1813 (reference to review of Grimm's *Correspondence*; *Letters*, II, 392); January, 1814 (reference to article on America; *Letters*, III, 66); July, 1814 (review of *Corsair* and *Lara*; *Letters*, II, 69); October, 1815 (description of Napoleon based on passage in a review; *Poetry*, V, 552); January, 1816 (reference to review of Hunt; *Letters*, IV, 104); October, 1816 (Scott's review of *Childe Harold* III; *Correspondence*, II, 41); April, 1817 (review of work on France; *Letters*, IV, 202); July, 1817 (mentions receipt; *Letters*, IV, 164); January, 1818 (review of Hunt; *Letters*, VI, 379); April, 1818 (review of *Childe Harold* IV and of Keats' *Endymion*); December, 1818 (review of Hazlitt; *Poetry*, IV, 575); April, 1819 (review of Whistlercraft; *Letters*, V, 37); November, 1819, and March, May, July, 1820 (mentions receipt of four *Quarterlies* and refers specifically to reviews of Milman's *Tasso*, May, and Spence's *Anecdotes*, July; *Letters*, V, 96, 54, 108-09); April, July, 1821 (references to "last two numbers"; *Letters*, V, 352); July, 1822 (review of dramas), April, 1823 (probable reference to article on Spain; *Poetry*, VI, 456).

⁷⁸ *Edinburgh Review*, XIII (October, 1808), 148-70.

career. The familiar outline is rather complete: the scantiness of education; experience in surveying; competence in military service with Braddock; difficulties of command during the Revolution; reluctance to accept the presidency; party strife; and retirement. The Whig view of the Revolution as preventable is strongly pressed, but Washington's fame is fully recognized. The "ill-judged contest . . . has made the name of Washington as lasting as time," says the reviewer, and he agrees with Dr. Ramsay that Washington's "military services were as great as ever were performed by any man to any nation."¹⁷ There are a few quotations from Washington's letters and journals, and brief characterizations of Jefferson and Hamilton. This review alone is an excellent supplement to Andrews' *History*. From it Byron could have formed a fairly accurate notion of Washington's career.

Of scarcely less interest to Byron would have been a review of Franklin's *Works* in the *Edinburgh* of July, 1806.¹⁸ Noting the delay of a collected edition, the reviewer says that many of Franklin's writings—those on England's dispute with the colonies, and his *Autobiography*—have been long and favorably known in England. There is unreserved tribute to Franklin's common sense and profundity in scientific speculation; to his shrewd understanding of politics; and to the simple and amiable tone of his letters. Again in the *Edinburgh* of August, 1817, which carried a review of *Manfred*, Byron probably read the first article, a review of *The Private Correspondence of Benjamin Franklin*.¹⁹ It began with this arresting sentence:

In one point of view, the name of Franklin must be considered as standing higher than any of the others which illustrated the eighteenth century

This, the reviewer goes on to say, is true because he excelled both as a statesman and as a philosopher:

Franklin would have been entitled to the glory of a first-rate discoverer in science . . . although he had not stood second to Washington alone in gaining for human liberty the most splendid and guiltless of its triumphs.²⁰

This attitude is exemplified on every page of the article. With liberal quotation from the letters themselves, Franklin is presented as a man of shrewd judgment, benevolence, political foresight, and religious tolerance—all qualities of which Byron was an admirer. Franklin's

¹⁷ *Ibid.*, pp. 153, 160.

¹⁸ *Ibid.*, VIII, 327-44.

¹⁹ *Ibid.*, XXVIII, 275-302.

²⁰ *Ibid.*, p. 275.

devotion to "freedom and peace" (*The Age of Bronze*, II. 246-48) affords an obvious opportunity for the reviewer to insist that the American War was preventable. He concludes with the gloomy prophecy that stupid British policy will probably lose Canada as well.

Of events in America after the death of Washington and Franklin, Byron could have formed some idea from the *Quarterly Review* of March, 1812, which carried a review of *Childe Harold*. Article one of this issue was a discussion of four documents: Sheffield's *Orders in Council and the American Embargo*; *Message of the President of the United States to Congress*, November 5, 1811; *Report of a Congressional Committee on Foreign Affairs*; and *A View of the State of Parties in the United States*.⁸¹ This article is, of course, a defence of Britain in the disputes over the freedom of the seas, which led in 1812 to America's declaration of war. It is charged that America is being misled by France, that commerce has not really been harmed by the British "Orders," and that America's threat to conquer Canada is ridiculous. Jefferson and his party are responsible for raising a popular clamor against England, when America's real interest lies in peace and in continued commerce with England. Toward the end of the article Jefferson is characterized as

a modern philosopher; a pupil of Rousseau; a reasoner on universal liberty, and universal philanthropy, whom all the horrors of the French revolution, and the total annihilation of liberty by military despotism which it engendered, were insufficient to drive from his preconceived idea, that virtue could exist only in democracy.⁸²

A number of travel books on America probably became known to Byron through issues of the reviews which he is known to have seen.⁸³ In the *Edinburgh*, reviews of the following appeared: Heriot's *Travels through the Canadas* (April, 1808), and Gary's *Letters from Canada* (November, 1814); Parkinson's *Tour in America in 1798, 1799, and 1800* and Michaux's *Travels in Ohio, Kentucky, and Tennessee* (October, 1805); Clarkson's *Memoir of Penn* (July, 1813); and Birkbeck's *Notes on a Journey from Virginia to Illinois* (June, 1818). In the

⁸¹ *Quarterly Review*, VII (March, 1812), 1-34

⁸² *Ibid.*, p. 32. The unsympathetic tone of the review is characteristic of the *Quarterly's* attitude toward America. On the other hand, the *Edinburgh* (though long thought by Americans to be unfriendly) was from the beginning fair and generous. See a recent study of the *Edinburgh's* policy: Paul Mowbray Wheeler, *America through British Eyes* (abstract of a Johns Hopkins dissertation), Rock Hill, S.C., 1935.

⁸³ Note 75, above.

Quarterly it is certain that he read the review of Inchiquen's *Letters* (January, 1814), for he wrote to Moore about the article. Other books which he would have found reviewed in issues he read are as follows: *A Sketch of the British Fur Trade in North America* (October, 1816); Birkbeck's *Notes* (April, 1818); Grece's *Facts and Observations respecting Canada and the United States*, *The Emigrant's Guide to Upper Canada*, and Strachan's *Visit to the Upper Provinces of Canada in 1819* (July, 1820); James' *Account of the Military Occurrences of the Late War between Great Britain and the United States*, Thomson's *Historical Sketches of the Late War*, and *Letters of Veritas*, the latter against Sir George Prevost's policies in Canada, (July, 1822); James' *Expedition from Pittsburgh to the Rocky Mountains*, the anonymous *Travels from Detroit to the Sources of the Mississippi*, and Nuttall's *Travels into Arkansas Territory* (April, 1823).⁶⁴

Since it is certain that Byron read the *Quarterly's* review of Inchiquen's *Letters*, we may take this article as a sample of that journal's treatment of travel books on America. The full title of the work itself indicates a favorable bias: *Inchiquen the Jesuit's Letters, during a late Residence in the United States of America; being a Fragment of a Private Correspondence, accidentally discovered in Europe, containing a favorable View of the Manners, Literature, and State of Society, of*

⁶⁴ A considerable number of other works dealing with America were reviewed in the *Edinburgh* and *Quarterly* before Byron's departure to Greece in 1823. Many of them he was probably familiar with, either through the published reviews, his own reading of the books themselves, or his conversations with Americans and others interested in transatlantic affairs. Some of the most interesting works reviewed by the *Edinburgh*—Byron's favorite review in spite of the early attack—are as follows: Janson's *Stranger in America* (April, 1807); Ashe's *Travels* (January, 1810); Lewis and Clarke's *Travels* (February, 1815); Hall's *Travels in Canada and the United States*, Palmer's *Journals*, Fearon's *Narrative*, and Bradbury's *Travels* (December, 1818); Stoddart's *Sketches of Louisiana*, Breckenridge's *Views of Louisiana*, and two emigrants' guide books to the west (July, 1819); and Howison's *Canada* (June, 1822). Two notes to Ashe (dated December 14, 1813, and January 5, 1814), suggest, though they do not prove, that Byron became acquainted with this returned traveler (*Letters*, II, 306-08; III, 4).

Volumes reviewed at length by the *Quarterly* are Gass's *Journal of the Lewis and Clark expedition* (May, 1809); Holmes' *American Annals* (November, 1809); Northmore's *Washington*, an "epic" poem (November, 1809); *Mr. Madison's War*, by a New England Farmer (September, 1812); Lewis and Clark's *Travels* (January, 1815); Fearon's *Sketches of America* and Bristed's *Resources of the United States* (January, 1819); *Memoirs of a Life in Pennsylvania* (January, 1822); Harmon's *Journal of Voyages and Travels* (January, 1822); Harris' *Tour through the United States*, Welby's *Visit to North America*, Flower's *Letters from Illinois*, and *Society and Manners in America*, by an Englishwoman (April, 1822); Faux's *Memorable Days in America* (July, 1823).

the United States; and a Refutation of many of the Aspersions cast upon this Country, by former Residents and Tourists. Following the usual policy of the *Quarterly*, the reviewer proceeds upon the basis of various authorities²² to justify the former "aspersions," and refute the present "favorable view." Beginning with a denial that the British leagued with the Indians to terrorize the Americans in the current war, the reviewer proceeds to catalogue the available evidence of vulgarity and depravity in America. Washington, though "a man of firmness, of rigid virtue, and strict integrity," failed to "stem the torrent of party-violence."²³ Jefferson, under French influence, is a boastful demagogue. Politics enters into every pursuit, dominated by a mean rapacity; Congress is made up of lawyers who use their desks for private business during the session, drink deep of peach brandy, and spit tobacco juice in the eyes of their opponents. Duels are common, courts rude and weak, laws virtually unenforced. Religious "freedom" has encouraged the growth of absurd sects such as "shakers." Southern gentlemen are waited upon by naked female slaves, bought and sold with callous trickery. Americans have accomplished very little in literature or science, yet they arrogantly wish to discard their inheritance of English language, literature, logic, and law. Their exalted opinion of themselves is needlessly encouraged by the sympathy of a perverse minority in England. Such American crudities as the *Quarterly* refers to were, as a matter of fact, habitually discounted and explained as favorably as possible by the *Edinburgh Review*, chief spokesman for the "perverse minority."

From various points of view and through various sources, then, Byron was well informed about the United States. From the *Quarterly's* disgruntled comment on Inchiquen's *Travels*, from Moore's *Epistles* and doubtless from Moore himself, and from other current accounts, he learned the reputed worst about the New World. But like his oracle, the *Edinburgh Review*, he minimized the hostile criticism. Having traveled in the East, he was something of a judge of travelers' tales; being perverse, he probably enjoyed disagreeing with such friends as Moore; and being a Whig, he was pleased to continue his faith in a

²² *Quarterly Review*, X (January, 1814), 494-539. Among the authorities so cited are Peter Porcupine, Wansey's *Excursion*, Moore's *Epistles*, Jefferson's *Notes on Virginia*, Ashe's *Travels*, Parkinson's *Tour*, Janson's *Stranger in America*, Lambert's *Travels*, Burnaby's *Travels*, Priest's *Travels*, Michaux's *Travels*.

²³ *Ibid.*, p. 497.

country which at least had no Tories in power. The basic and undeniable heroism illustrated in the Revolution and its patriots gave him a deep and sincere regard for the United States, and the talented young Americans whose compliments flattered him were something of a guarantee for the future. To this extent, the enthusiasm of the poetical allusions and the republican fervor of his prose seem to have been sincere and constant.⁸⁷ "Oh Washington" was more than rhetoric, and if the expression was naive, the author was not uninformed.

In view of this it is surprising that Byron never came to the United States. His intention to visit the republic, often expressed, never became a definite plan, and he appears never to have seriously contemplated settling in North America. Why was this? Return to England was out of the question, and though Italy amused him its charms palled after a while. His income was ample, and there was no real obstacle to a transatlantic expedition. The answer lies rather in his temperament, which is revealed more clearly in his speculations about South America.

Poetically Byron found South America much less important than the United States. Only in *The Age of Bronze* (1822-23) does he have more than a passing allusion.⁸⁸ In this poem he comments enthusiastically on the recent successes of revolutionists in South America. The Atlantic "girds a tyrant's grave" (Napoleon's)

While even the Spaniard's thirst of gold and war
Forgets Pizarro to shout Bolivar!

Where Cortes' and Pizarro's banner flew,
The infant world redeems her name of "New."
'Tis the old aspiration breathed afresh,
To kindle souls within degraded flesh

⁸⁷ I have found little evidence of even temporary irritation with things American. February 21, 1820, he wrote to Murray: "Somebody has sent me some American abuse of Mazeppa and 'The Ode on Venice' in future I will compliment nothing but Canada and desert to the English" (*Letters*, IV, 410). The Countess of Blessington records in her *Conversations* (London, 1894), p. 124, Byron's anger at some abuse in an American newspaper "alluding to a report that he was going to reside there . . ." Byron complained that America "now rivalled her mother country in cant . . ." He said that he was never sincere in his praises of the Americans, and that he only extolled their navy to pique Mr. Croker" (A reference to the "Ode on Venice," see note 8 above.) But the Countess quotes this as an example of childish petulance rather than of real opinion.

⁸⁸ In *The Prophecy of Dante* (1819), *Poetry*, IV, 262, Byron refers to the "Discoverers of new worlds which take their name." In *Don Juan* XII, vi, he refers to European loans made to Columbia and Peru; *Poetry*, VI, 457. In the

This is the spirit of ancient Greece, happily reincarnated in Greece herself:

The Athenian wears again Harmodius' sword;
The Chili chief abjures his foreign lord. . . ."

If Byron found little occasion to express himself poetically about South America, it was not for lack of interest, for from 1819 until 1823 he toyed with the idea of emigrating there as a gentleman-planter. He first announced this design in a letter to Hobhouse, August 20, 1819. The tone is flippant, and Hobhouse might well have disregarded it as mere fooling:

And now what do you think of doing? I have two notions one to visit England in the spring, the other to go to South America. Europe is grown decrepit; besides, it is the same thing over again; those fellows are fresh as their world, and fierce as their earthquakes.

Besides, I am enamoured of General Paer, who has proved that my grandfather spoke truth about the Patagonians, with his gigantic cavalry"

On October 3, Byron wrote more seriously to Hobhouse. He resents being "a fan-carrier," and sees in South America an opportunity for peace and modest prosperity:

My South American project, of which I believe I spoke to you (as you mention it)—was this I perceived by the inclosed paragraphs that advantageous offers were—or are to be held out to settlers in the Venezuela territory. My affairs in England are nearly settled or in prospect of settlement; in Italy I have no debts, and I could leave it when I choose. The Anglo-Americans are a little too coarse for me, and their climate too cold, and I should prefer the others. I could soon grapple with the Spanish language. Ellice or others would get me letters to Bolivar and his government, and if men of little, or no property are encouraged there, surely with present income, and—if I could sell Rochdale—with some capital, I might be suffered as a landholder there, or at least as a tenant, and if possible, and legal, a Citizen. I wish you would speak to Perry of the *M[orning] C[hronicle]*—who is their Gazetteer—about this, and ask . . . for information on the subject. I assure you I am very serious in the idea, and that the notion has been about me for a long time, as you will see by the worn state of the advertisement.

same poem, XV, xxvii, he remarks that "Columbus found a new world in a cutter", *Poetry*, VI, 552.

"*The Age of Bronze*, II, 251-77; *Poetry*, V, 555-56. In 1809 there were revolutionary outbreaks in Venezuela, Ecuador, Peru, and the Argentine. In 1810 revolt occurred in Chile. Byron's reference to the "Chili chief" who "abjures his foreign lord" is probably to Bernardo O'Higgins, who formally proclaimed independence in February, 1817, and secured it by a decisive victory in April, 1818.

"*Correspondence*, II, 122. On May 17, 1819, Byron had written to Hobhouse, "Don't go to America; there are leagues enough between us already" (*ibid.*, p. 111). There is no reference to an intended trip to America in *The Recollections of Lord Broughton* (6 vols., London, 1910).

I should go there with my natural daughter, Allegra,—now nearly three years old, and with me here,—and pitch my tent for good and all. . . .

You must not talk to me of England, that is out of the question. . . . Yet I want a country, and a home, and—if possible—a free one. I am not yet thirty-two years of age. I might still be a decent citizen, and found a house, and a family as good—or better—than the former. . . . When tens of thousands of our countrymen are colonizing . . . from so many causes, does my notion seem visionary or irrational? There is no freedom in Europe—that's certain; it is besides a worn out portion of the globe. . . . Do not laugh at me; you will, but I assure you I am quite in earnest if the thing be practicable. I do not want to have anything to do with war projects, but to go there as a settler . . .¹¹

Two days later Byron mentioned his plan to Webster,¹² referring to his letter to Hobhouse, and on October 26 he besought Kinnaird to see Perry about South America.¹³ On October 29 he wrote thus to Murray:

I probably must return for business, or in my way to America. . . . I should not make a bad South American planter, and I should take my natural daughter, Allegra, with me, and settle. I wrote at length to Hobhouse, to get information from Perry, who, I suppose, is the best topographer and trumpeter of the new Republicans.¹⁴

Two letters of November show Byron's relationship with the Countess Guiccioli as a complication in his plans. To Murray he wrote:

If she and her husband make it up, you will, perhaps, see me in England sooner than you expect: if not, I shall retire with her to France or America, change my name, and lead a quiet provincial life . . .¹⁵

Writing to Kinnaird several days later, Byron speaks of overcoming a momentary impulse to set off with the Countess "for France and America." Apparently he had now decided that she should not accompany him:

¹¹ *Letters*, IV, 355-59. Prothero reprints "the inclosed paragraphs" in a note. The first summarizes a report by an unnamed Englishman on his favorable reception in Angostura, Venezuela, and on the inducements offered to English settlers: "Fathers of families are to become citizens the moment they land; others at the time prescribed by the Constitution. Export duties free for five years." The second item reports the departure of two Venezuelan commissioners for London "with ample powers" to encourage emigrants. The Ellice mentioned in this letter was a prominent Whig, then M.P., and his wife the widow of Byron's cousin, Captain Bettesworth. He had estates in New York and Canada, and was interested in Canadian fur companies. I have found no account of interests in South America. James Perry (1756-1821) was editor and part owner of the *Morning Chronicle*, and prominent in Whig circles.

¹² *Letters*, IV, 359-60.

¹³ *Correspondence*, II, 125.

¹⁴ *Letters*, IV, 369. To Trelawny, *op. cit.* pp 99, 104, Byron twice mentioned the possibility of investing in American mines.

¹⁵ *Letters*, IV, 377.

But I shall quit Italy. I have done my duty, but the country has become sad to me; I feel alone in it; and as I left England on account of my own wife, I now quit Italy for the wife of another.

I shall make my way to Calais, as I can without going through Paris. I do not come to England for pleasure, but I know not where to go, unless to America. . . .

I shall bring my little daughter Allegra with me, but I know not where to go [i.e. in England]. . . . But I hope to get out to America, if I don't take a much longer voyage. I should prefer Spanish America."⁹⁷

By this time the projected venture has become for Byron an escape from Europe rather than a pilgrimage to America. He is pathetically anxious to keep Allegra with him, but he is more weary of Italy and depressed by the thought of England than he is enamoured of the new republics. "You have never answered my letter of South American enquiries," he reminds Hobhouse on November 21. "I must go there, or to the Cape, anything but stay near England. . . ." "⁹⁸

In the same month, Hobhouse wrote at last and at length, discouraging the South American project. What he said we may guess from his comment to Murray:

To be sure, it is impossible that Lord B should seriously contemplate, or, if he does, he must not expect us to encourage, this mad scheme . . . Our poet is too good for a planter—too good to sit down before a fire made of mare's legs, to a dinner of beef without salt and bread. It is the wildest of all his meditations—pray tell him. The plague and Yellow Jack, and famine and free quarter, besides a thousand other ills, will stare him in the face. No toothbrushes, no corn-rubbers, no *Quarterly Reviews*. In short, plenty of all he abominates, and nothing of all he loves."⁹⁹

Hobhouse's advice, together with his own indecision, put the matter off, but Byron still thought of leaving Italy. Writing to Augusta, January 2, 1820, he speaks of his wish to avoid trouble in England. It has made me think of Sth America, or the Cape, or Turkey, or anywhere, so that I can but preserve my independence of means to live withal."¹⁰⁰

In "Detached Thoughts" of 1821 he recalls his plan "of going to one of the Americas, Eng. or Sp.," as if it were wholly a thing of the past,¹⁰¹ but in 1822 he renewed his inquiries. Writing to Edward Ellice on June 12, he said:

⁹⁷ *Correspondence*, II, 126-27.

⁹⁸ *Correspondence*, II, 131.

⁹⁹ Samuel Smiles, *Memoir of John Murray* (London, 1891), I, 409. Reprinted as a note by Prothero, *Letters*, IV, 356.

¹⁰⁰ *Letters*, IV, 397.

¹⁰¹ *Ibid.*, V, 451.

By your extensive connexions, no one can have better opportunities of hearing the real state of *South America*—I mean Bolivar's country. I have many years had transatlantic projects of settlement, and what I could wish from you would be some information of the best course to pursue, and some letters of recommendation in case I should sail for Angostura. I am told that land is very cheap there; but though I have no great disposable funds to vest in such purchases, yet my income, such as it is, would be sufficient in any country (except England) for all the comforts of life, and for most of its luxuries. The war there is now over, and as I do not go there to *speculate*, but to settle, without any views but those of independence and the enjoyment of the common civil rights, I should presume such an arrival would not be unwelcome.

All I request of you is, not to *discourage* nor *encourage*, but to give me such a statement as you think prudent and proper. I do not address my other friends upon this subject, who would only throw obstacles in my way, and bore me to return to England: which I never will do, unless compelled by some insuperable cause. I have a quantity of furniture, books, etc., etc, which I could easily ship from Leghorn; but I wish to "look before I leap" over the Atlantic. Is it true that for a few thousand dollars a large tract of land may be obtained? I speak of *South America*, recollect. I have read some publications on the subject, but they seemed violent and vulgar party productions.²⁸¹

Ellice's reply was as vigorously discouraging as Hobhouse's letter of 1819; Bolivar's passing, Ellice felt, would inevitably lead to new disorder.²⁸² How much Byron was disturbed by this gloomy prophecy is difficult to say, for by the summer of 1822 a new interest, the cause of Greek independence, had attracted him. He wrote to Moore on August 27, 1822:

I had, and still have, thoughts of South America, but am fluctuating between it and Greece. I should have gone, long ago, to one of them, but for my liaison with the Countess G[uiccioli]; for love, in these days, is little compatible with glory. *She* would be delighted to go too; but I do not choose to expose her to a long voyage, and a residence in an unsettled country, where I shall probably take a part of some sort.²⁸³

A month later Greece is temporarily dismissed from his mind; he writes to Kinnaid:

The reason why I am so anxious to settle my affairs, and learn what I may have to trust to, is that I have long had a notion of emigration from your worn-out Europe; but am undecided as to *where*, South America, the United States, or even Van Diemen's Land, of which I hear much, as a good place to settle in.²⁸⁴

²⁸¹ *Ibid.*, VI, 89-91. Before Ellice could possibly have replied, Byron had a momentary impulse to sail for America. See Shelley's *Letters*, ed. Ingpen (London, 1909), II, 985.

²⁸² Moore V, 343; this summary is reprinted as a note in *Letters*, VI, 90-91.

²⁸³ *Letters*, VI, 110-12.

²⁸⁴ *Correspondence*, II, 231.

But by May 12, 1823, he has decided that Greece is a better speculation for the English to back than America;¹⁰⁶ and for once he sided with England—on July 23, 1823, he sailed for Greece. In his letters there is no further mention of the project to emigrate to America.¹⁰⁶

Now let us inquire what background of information Byron had for his interest in South America. The inquiries made of Hobhouse and Ellice indicate, as we would naturally expect, that he found it more difficult to inform himself about South America than about the United States. South America was almost wholly Spanish and Portuguese, a foreign continent, whereas the United States was basically English. Moreover, the United States, though rapidly expanding, was relatively well organized and stable in the early eighteen hundreds, whereas Byron's interest in South America coincided with the period of greatest upheaval. Venezuela, "Bolivar's country," as Byron called it, was the center of his interest. In 1811 it declared independence from Spain, but the armed struggle under Bolivar's leadership continued until 1824.¹⁰⁷

Some knowledge of the earlier history which explains the revolt of Bolivar, Byron gained in his youth from William Robertson's *The History of the Discovery and Settlement of America*, a work published in 1777 and regarded in Byron's day as standard.¹⁰⁸ Robertson's *History of Scotland* (1758), and his *History of Charles V* had established his reputation as a historian, and the *History of America* was based upon some eight years of study; a lengthy bibliography of Spanish books and manuscripts precedes the text. The eight chapter headings give some idea of the scope of the work: "Progress of navigation . . . up to Columbus"; "Columbus' career"; "Further Spanish Explorations"; "View of America when first Discovered"; "Conquest of New Spain by Cortes"; "Conquest of Peru by Pizarro"; "View of these more Civilized sections of America"; "Spanish Government and Commerce." A modern lay reader will feel that Robertson's *History* is a substantial

¹⁰⁶ *Letters*, VI, 210

¹⁰⁷ According to William Parry, *Last Days of Lord Byron* (London, 1825), Byron talked of visiting America when the war in Greece was over. Noted by Dora N. Raymond, *The Political Career of Lord Byron* (London, 1924), p. 283.

¹⁰⁸ In 1819 Bolivar united Venezuela, Ecuador, and Colombia in a republic under the latter name; in 1829 Venezuela withdrew, Bolivar remaining as head of the Colombian government. In 1830, the year of Bolivar's death, Ecuador withdrew.

¹⁰⁹ Byron's memorandum of 1807, Moore, I, 142. Robertson was the source for a famous sonnet; see J. W. Beach, "Keats's Realms of Gold," *PMLA*, XLIX (March, 1934), 246-57.

and respectable piece of historical writing. There is a vigorous emphasis on fact, a judicial turn of mind, a dignified and simple style. From this work Byron would have developed a natural sympathy for revolt against the old regime of Spanish exploitation.

Supplementary to Robertson were two long poems on Columbus, one by Joel Barlow, mentioned above, the other by Samuel Rogers, Byron's friend.¹⁰⁹ Poetically, neither work is very important, but both include interesting episodes of early American history and legend, sonorous repetitions of exotic American names, and, in the fashion of the day, more or less learned notes. Barlow, in the earlier books of his *Vision*, was much occupied with the Incas. Rogers' poem, really a translation of a Spanish work, restricts itself to Columbus' voyage, and his heroic leadership of his men.

To supplement the knowledge of South America gained from Robertson and from the two poems, there were only a few articles in the *Edinburgh* and the *Quarterly*; and there is frequent reference to the difficulty of getting adequate information.

In the issues of the *Edinburgh* to which Byron specifically alludes the following volumes dealing with South America were reviewed: Depons' *Voyage à la Partie Orientale de la Terre-Firme dans l'Amérique Meridionale* (July, 1806); Helms' *Travels from Buenos Ayres, by Potosi, to Lima* (October, 1806); Humboldt's *Researches concerning the Institutions and Monuments of the Ancient Inhabitants of America*, translated from the French (November, 1814); and *Della Patria di Cristoforo Colombo* (December, 1816). It is equally probable that Byron saw in the *Quarterly*, reviews of: Walton's *Present State of the Spanish Colonies* (June, 1812); Mawe's *Travels in the Interior of Brasil* (June, 1812); Humboldt's *Personal Narrative of Travels to the Equinoctial Regions of the New Continent* (January, 1816, April, 1819, and July, 1821); De Pradt's *Des Colonies et de l'Amérique* and *Des trois derniers Mois d'Amérique* (July, 1817); *Outline of the Revolution in Spanish America*, by a South American (July, 1817).¹¹⁰

¹⁰⁹ See note 49. Rogers' *Poems, including Fragments of a Poem Called the 'Voyage of Columbus'* was reviewed in the *Quarterly* for March, 1813, and in the *Edinburgh* for October. Byron read both reviews. *Letters*, II, 218-19, 350-51.

¹¹⁰ See above, note 75. Other issues of the *Edinburgh* reviewed *Lettre aux Espagnols-Américains par un de leurs Compatriotes* (January, 1809); Humboldt's *Essai Politique sur le Royaume de la Nouvelle Espagne* (November, 1811); and De Pradt's *Europe and America in 1821*, tr. from the French (June, 1822). The *Quarterly* reviewed Southey's *History of Brasil* (November, 1810, and October, 1817); and Koster's *Travels in Brasil* (January, 1817). There were,

It will be noticed that all of these antedate Byron's special interest in South America by two years or more. Several dealt with matters of antiquarian or curious interest, rather than with the general and present state of the various countries. Two of the best articles are those in the *Quarterly* for June, 1812, and July, 1817. The former is based upon Walton's *Present State of the Spanish Colonies* and Mawe's *Travels in the Interior of Brasil*. Walton described himself as "junior secretary to the expedition which captured the City of Santo Domingo from the French, and resident British Agent there." After stigmatizing Walton's two volumes as rambling and over-ambitious, the reviewer proceeds to a rapid account of the varied population of the colonies, the easy wealth, the unwise government restriction of industry, the interest in French revolutionary philosophy, the loyalty of the colonists during the early days of Spain's war with France, the eventual revolt against Spain, encouraged by French intrigue. Mawe's volume on Brazil, more directly analyzed in a separate article, yields the reviewer a good deal of information on the primitive state of agriculture, the depravity of the mass of the people, the over-exploitation of mining, and the prevalence of fraud and speculation.¹¹¹

The *Quarterly* for July, 1817, contained a timely article reviewing three recent books on the political situation. The reviewer mentions European neglect of South American affairs occasioned by the Napoleonic wars, and emphasizes the great importance of the present revolutions. There is then a comparison of the revolting South Americans and the lost British colonies of North America. Though certain similarities are admitted, the reviewer with almost a Whig enthusiasm praises the capabilities of the Anglo-Americans in contrast to the "mixed races" of South America. The poverty, ignorance, and lack of commercial development are pointed out. The reviewer admits that tyrannous administration has made revolt natural, but denies that the success of the revolutionists will immediately improve the situation. Then follow several pages of justifying the British policy of neutrality toward the South American struggle. Turning to the struggle itself, the reviewer chronicles the death of General Miranda, Bolivar's recent proclamation against ruthless killing of enemies, and various military

of course, a great many publications dealing with the West Indies, especially with regard to the slave trade. Byron makes no allusion to this section, although he sympathized with Wilberforce's fight against the trade (*Letters* V, 451)

¹¹¹ *Quarterly Review*, VII (June, 1812), 235-65, 342-56

manoeuvres of 1812 to 1816. Events in Mexico, Argentine, and Chili are more briefly stated. The article concludes with an emphasis of the greater commercial opportunities for England at the close of the struggle, no matter how it is settled; and a final plea for the observance of the policy of neutrality.¹¹⁸

From the favorable though brief mention of Bolivar in this article, and from newspaper dispatches, Byron seems to have formed the admiration for the Liberator which he commemorated in the name of his yacht. For the *Bolivar* was completed and christened in the early summer of 1822,¹¹⁹ apparently before Byron had come upon the disillusioning *Narrative of Hippiusley*, though this was published by Murray in 1819.¹²⁰ Describing himself as "Late Colonel of the First Venezuelan Hussars, in the service of the Republic, and Colonel-Commandant of the British Brigade in South America," Hippiusley records the enthusiasm with which he and his companions set out for Venezuela; methods of recruiting, quarrels, and difficulties in organization; "the utter want of a commissariat, and the intolerable heat of the climate"; and most important, the failure of Bolivar to keep agreements. Regarding Bolivar himself, Hippiusley is extremely critical:

. . . Bolivar's personal appearance is neither striking nor prepossessing. There is nothing about him, or belonging to him, either in manners, figure, or conduct, to command attention . . . The smallness of his stature, and the meanness of his figure and physiognomy, would rather create contempt than respect. . . He possesses neither gratitude, honour, liberality, sympathy, nor humanity; yet he pretends that his heart and disposition are congenial to all those sentiments, and constantly act in unison.

Personal courage he is gifted with, even to a fault. He has, however, never yet achieved any action worthy of renown, or equal to the real intrepidity with which he is endowed; because reason, judgment, and even necessary discretion have been wanting. .

Tactic, movements, and manoeuvre, are as unknown to him as to the lowest of his troops. All idea of regularity, system, or the common routine of an army, or even a regiment, he is totally unacquainted with. Hence arise all the disasters he meets.

¹¹⁸ *Ibid.*, XVII (July, 1817), 530-62.

¹¹⁹ There are numerous references to the *Bolivar* in Shelley's *Letters*, II, 966 ff. According to Byron's letter of August 10, 1822, Trelawny was asked to see about getting "American papers" for the boat, and when she was sold in 1823 there were American flags on board (*Letters*, VI, 103-04, 224). Of this, Miss Raymond, *op. cit.*, p. 171, remarks, "It seemed a first step to American citizenship."

¹²⁰ According to Trelawny, *op. cit.*, p. 120, Byron was reading Hippiusley on the voyage to Greece in late July and early August of 1823.

Hippisley goes on to accuse Bolivar of permitting and even witnessing useless slaughter, though such tactics were begun by Murillo, the royalist general. Bolivar apes Bonaparte, but has no self-control:

He gives way to sudden gusts of resentment, and becomes, in a moment, a madman and (pardon the expression) a blackguard; throws himself into his hammock . . . and utters curses and imprecations upon all around him, of the most disgusting and diabolical nature.¹²⁵

Perhaps it was Hippisley who persuaded Byron in May of 1823 that Greece was a better speculation than America.¹²⁶

From this review of Byron's reading it is clear that Byron knew far less about South America than about the United States. There were comparatively few books, and many of these were of little value or were, as he said, "violent and vulgar party productions." There is no record of his meeting anyone who had actually been in South America.¹²⁷ How then can his persistent design of emigration be explained? Largely, one must conclude, by the very charm of remoteness which South America exercised upon the romantic side of his nature. The comments to Murray, Hobhouse, and his other friends show that the project was largely one of escape. He thought Europe a "worn out portion of the globe." But why, as we have asked before, did he not choose the United States rather than Venezuela? By his own statement, "the Anglo-Americans are a little too coarse for me, and their climate too cold." But after reading such discussions as the *Quarterly* articles of 1812 and 1817—or even without them—Byron could hardly have been under the delusion that South America was less coarse. Nor was he attracted by the "war projects" of South America; he wanted "to go there as a settler." The truth is probably that he felt the United States was still too close to England, and American life permeated by many English faults which freedom had served to exaggerate. He could not have read current discussions about the United States without coming upon evidence of religious bigotry and moral cant, as well as coarseness of manners. And though he had a fairly strong faith in the Republic's future, the future was distant, and he was too tired to struggle for it

¹²⁵ G. Hippisley, *A Narrative of the Expedition to the Rivers Orinoco and Apure, in South America; Which Sailed from England in November, 1817, and Joined Patriotic Forces in Venezuela and Caracas* (London, 1819), pp. v, 464-65.

¹²⁶ *Letters*, VI, 210. See above, note 105.

¹²⁷ Colonel Stanhope, whom he met late in 1823 in Greece, had been in South America about 1807. *DNB*.

in the English way of participation in acrimonious debate and in affairs. Retirement to South America as a gentleman-planter appealed to his aristocratic tastes as a welcome relief from the restlessness of his career in England and in Italy.

But he never sailed westward, even to survey the prospects. On one hand there was the attachment for La Guiccioli, and even his imagination was unable to envision her as a planter's helpmeet. Then there was the realistic advice of Hobhouse, Ellice, and no doubt others as well. Not wholly convinced by it, he does not seem to have taken the trouble to refute it. Finally, there was the Greek crisis of 1823, and after all he decided to have something to do with "war projects." The enterprise was at once remote and familiar—perhaps the quintessence of romantic appeal. He had lived all his life in an age of wars, but had never been a participant. Greece he had worshipped since his school-days as the cradle of human freedom. There in 1810-11 he had spent perhaps the most pleasant year of his youth. Through *Childe Harold*, Greece had helped him win fame in that world which he loved better than he liked to admit, it might once more reflect some glory on his name. And so it did. Service and death in the cause of Greek independence had for Byron and his generation a poetic quality, an embodiment of loyalty to great traditions that rose above party and above the scandals of private life. A similar end for Byron in either America would have been insignificant in comparison.

Byron's interest in the Americas, though it had little effect on his actual career, does throw some light upon the quality of his mind, his character, and his poetry. Virtually every mention of America in his letters and journals does him some slight credit. Behind the romantic grandiloquence of the poetic allusions there was a thoughtful, sympathetic, and realistic concern. More than any other English writer of his period in literature, he was alert to the political and social experiments across the Atlantic. This is to say again what has many times been said in other contexts: of all the great English writers of his day, Byron was at once the most contemporary and the most cosmopolitan.

THE POLICY OF THE AMERICAN STATE DEPARTMENT TOWARD MISSIONARIES IN THE FAR EAST¹

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It is safe to say that during the pre-treaty period—that is, previous to the negotiation of the first Sino-American treaty in 1844—the United States Department of State had no policy concerning missionary work in the Far East. Indeed, the United States then had no official relationships with the governments of China, Japan, or Korea; and, when Caleb Cushing arrived in China to arrange for the treaty of 1844, he carried instructions which, beyond specifying that he was to secure to Americans in China whatever privileges were granted to the citizens of other countries, made no mention of religion.² The religious clause that found its way into the treaty of Wanghia was more the result of the influence upon Cushing of the American missionaries who served him as linguists and secretaries than the outcome of any specific planning by the American State Department.

That there was an absence of policy up to the very point of the negotiation of the 1844 treaty is certain. American missionaries who entered China before that event recognized that they did so at their own risk. Indeed, they lived under the shelter of the traders in the factories at Canton or found refuge in the Portuguese Concession at Macao.

The Treaty of Wanghia (1844) marked the inauguration of a vague policy on the part of the American government toward missionary work in China; for Article 17 of that treaty guaranteed the right of American missionaries to reside, to erect churches and hospitals, and to have cemeteries at the five ports opened to foreign trade. To be specific, it recognized the right of foreigners to observe Christian worship at the treaty-ports, but it made no reference whatever to native Chris-

¹ Summary of a dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in History, State College of Washington (1937).

² *Senate Documents 1844*, VIII, Doc 138, pp 1-5, 8-9. Before the signing of the American treaty in 1844 the only treaty provision concerned with Christianity in China was a forgotten clause in the century-old treaty of Kiakhta with Russia which provided that four Orthodox Russian priests might reside at the Russian legation house in Peking. The British treaties of 1842-43 made no special provision for missionaries. Apparently it was taken for granted that they could reside at the open ports.

tians.⁸ In addition to the above-mentioned provisions the treaty placed American citizens, including missionaries, under extraterritorial jurisdiction.

On the whole, the limited privileges granted by the treaties negotiated between China and the Powers during 1843-44 were unsatisfactory to merchants and missionaries alike. The latter did not confine themselves strictly to the treaty-ports; for, encouraged by the Imperial decrees of 1844 and 1846—which, though warning against the promulgation of Christianity by foreigners beyond the ports, yet exempted native Christians from the punishments and penalties imposed upon them by anti-Christian edicts of an earlier date—they carried on a vigorous propaganda in regions adjacent to the ports.

With respect to the incidents and misunderstandings that, between 1846 and the second treaty series with China in 1858 and 1860, naturally grew out of this situation and that of the Taiping rebellion, American diplomats were in a quandary to know just what position to take. There was no doubt about the right of the missionary to reside and carry on work at the ports, but just what attitude should be taken when, as occasionally happened, missionaries requested protection for their persecuted converts was by no means so easily determined. On the whole, however, the attitude of the State Department as represented by its Commissioners to China was to support the rights of the missionaries in the port cities, and, without actually using force to that end, to endeavor to impress upon Chinese officials the realization that a policy of religious intolerance was absolutely abhorrent to Western civilization and might lead to grave consequences. It is also worthy of note that the Department refused to be responsible for the protection of missionaries if they meddled in the internal affairs of China by showing sympathy for the Taiping rebellion.

The failure of Chinese officials to carry out the policy of tolerance toward native Christians as decreed by the Imperial government in 1844 and 1846 induced missionaries in China to seek some stronger support of toleration. This desire, together with the uncertainty of the situation between 1850 and 1858, made foreign diplomats, also, willing that a clause guaranteeing toleration to native Christians be written into the treaty revisions of 1858. American missionaries were highly influ-

⁸ William F. Malloy, *Treaties, Conventions, International Acts, Protocols, and Agreements between the United States and Other Powers, 1776-1909* (Washington, 1910), I, 201

ential in the introduction of such a clause into the American treaty, and the American Commissioner, William B. Reed, was rather proud of its adoption.

As a result of these labors, Article 11 of the treaty of 1858 renewed the extraterritorial privilege of Americans in China, Article 12 gave reassurance of the right of missionaries to reside and build religious institutions at the treaty ports, and Article 29 guaranteed to Christians everywhere in China immunity from molestation on account of their religion.⁴ Similar clauses were incorporated into the Russian, the French, and the British Treaties of 1858 and 1860. The treaty of 1858 marked a change in the policy of the American State Department, for the toleration clause made the American government, together with other Western governments, to some extent the guarantors of religious toleration in China.

It is interesting that at this very time (1857-58) Townsend Harris was negotiating his treaty with Japan,⁵ and, although carrying no specific instructions to negotiate on religious matters, he not only secured the right of Americans to conduct worship at the open ports, but he earnestly endeavored to persuade the Japanese to accept a clause providing for religious toleration in Japan. Harris' objective in this matter does not seem to have differed much from that of Reed, Williams, and Martin in China. They all felt that toleration clauses would result in ultimate good to China and Japan, but none of them deemed it wise to resort to coercive methods. Reed and his co-laborers succeeded in China because that country, having just experienced defeat in a war with England and France, was in a mood to acquiesce in the wishes of any Western power even when request was made for a treaty with provisions which, in their last analysis, were a species of interference in China's internal affairs.⁶

Japan, not being in quite so critical a situation, was unwilling to accept an out-and-out toleration clause, and Harris was wise enough not to press the matter unduly. There is no doubt, however, that if his plans had carried, a toleration clause would have been introduced into his treaty of 1858. There is, likewise, little doubt that the American

⁴ Malloy, *op cit*, I, 211-21.

⁵ *Ibid.*, 1000-1006.

⁶ G. F. Seward writing to Secretary Evarts on May 22, 1878, said, "It is true that our own treaties were procured in the ordinary course of peaceful diplomatic negotiations, but it is well known that those negotiations became possible only because other powers had been in the field with fleets and armies" (*U S Foreign Relations, 1878*, p. 130).

government would have sanctioned such a clause just as readily as it sanctioned Article 29 of Reed's treaty. Indeed, inasmuch as the State Department accepted the work of Reed in China and Harris in Japan without criticism, it may be said that policies initiated by these men became the policies of the Department, and that treaty toleration of Christianity in a non-Christian land was as acceptable to the American government in 1858 as it was to other Christian powers.

It should be noted, however, that the failure to secure toleration by treaty in Japan in 1858 caused American and other foreign diplomats to use their influence continually to induce the Japanese government to give its own guarantees of toleration; and the desire of Japan to appear well enough in the eyes of the West to secure the abolition of extraterritorial privileges and other unequal treaty rights led ultimately to decrees of toleration and the incorporation of a toleration clause into the constitution of Japan.⁷

China had started on the road to legalized toleration of Christianity by issuing the decrees of 1844 and 1846, but the disrupted conditions in that country, due in part to the Taiping movement, made it apparent that China could not soon carry such a policy into action. If the Chinese government, like that of Japan, had really been able to execute toleration decrees when once they had been officially issued, there is little likelihood that toleration clauses would have been introduced into the treaties of 1858 and 1860. The toleration articles were, as the missionaries said, introduced to bolster up the Government's decrees. After an initial stage of intolerance and uncertainty, Japan seized hold of the religious problem in such a definite way as to take the matter completely out of foreign hands; and, after 1873, there was practically no diplomatic correspondence between the United States and Japan that had to do with missionary or religious matters.

To deal here with the opening of Korea to Christianity is out of chronological order, but it seems appropriate to make a comparison between events there after 1882 and events in China and Japan after 1858. In the case of Korea also, the American negotiators of the treaty of 1882, which was the first to be contracted with a Western power, displayed an interest in securing some kind of understanding in religious matters. Li Hung-chang, the Chinese mediator, so guided matters, how-

⁷ Count Shigenobu Okuma, *Fifty Years of Old Japan* (London, 1910), II, Appendix A, p. 582

ever, that the treaty made no mention of missionaries as a group.⁸ Their rights were, nevertheless, tacitly conceded by provisions introduced first into the American treaty, and later into the British and French treaties. Specific clauses of these treaties permitted foreigners to worship at the ports and allowed travel under passport in the interior. It is significant that none of these treaties said anything about the right to propagate Christianity or the status of Koreans who accepted it.⁹ The old laws interdicting the Western religion continued to be in force; but little by little they were allowed to pass into disuse, and finally, by tacit consent of the Government, missionaries were allowed to carry on their work unmolested.

American missionaries made no serious attempt to have their accumulating privileges written into a treaty, for they recognized, as did the State Department also, that privileges gained through a genuine change in the attitude of the Korean government were worth much more than those gained by external influence. Thus it came about that, although the laws against Christianity lived on for many years, they became dead letters; for the desire of the Korean government to keep the friendship of the United States caused it to show a very kindly attitude toward missionaries, most of whom were Americans, and toward their converts.

The course of events in Korea paralleled to a great extent the earlier developments in Japan, with the exception that before toleration principles had been publicly avowed by the Government the country came under the influence of its southern neighbor. When Korea was annexed to Japan in 1910, the principles of religious toleration as announced by the Japanese Constitution of 1889 were made applicable to Korea.¹⁰

The situation that developed in China differed considerably from the course of events in Japan and Korea. Some writers give the impression that the difference was altogether due to the placing of toleration clauses in the treaties of 1858 and 1860.¹¹ These persons lose

⁸ Malloy, *op cit.*, I, 334-39.

⁹ Henry Chung, *Korea—Treaties and Agreements* (New York, 1919), pp 84, 85, 89, 110, 111, 115, 136, 137, 141.

¹⁰ *For. Rel 1911*, p 324, Hon Midori Konatsu, Secretary General to the Minister of Foreign Affairs in Chosen, "Religious Liberty in Korea," *Missionary Review of the World*, XXXIX (Dec., 1916), 894.

¹¹ Tyler Dennett makes this comparison of developments in the three countries: "When one compares the hospitality they [missionaries] received from the Japanese and Korean governments which were never coerced by the foreign

sight of the fact that the clauses were inserted into the treaties because at the time China showed a lack of consistency in the administration of her own toleration decrees. China, being a much larger country than either Korea or Japan, has always found difficulty in securing uniform action by all the provinces of her wide dominion. Especially was this true in the middle of the nineteenth century, when the Taiping rebellion and an undercurrent of anti-Manchu agitation greatly weakened the Central government.

It is small wonder that Western diplomats, confronted with this situation, concluded that toleration by decree needed the support of toleration by treaty. From the point of view of the present, toleration by treaty must be judged as a mistake, for it did not bring about a genuine spirit of toleration within the country; but in 1858 it appeared to be the best plan, and it is quite conceivable that, under any plan whatsoever, China would have experienced much unrest and many misfortunes before a nation-wide sentiment favorable to the toleration of Christianity would have developed. Especially might this have been true if the Western powers had carried out the same economic and imperialistic policies which they have followed in that country.

Whatever the cause, China has been the land of missionary problems, and for that reason the American State Department has found it necessary to make adjustments and reshape its policies there to a far greater extent than in any other part of the Far East. A comparative summary of the evolution of this policy between 1858 and 1937 will go far toward gathering together the essential findings of this thesis.

Soon after the second treaty series, that of 1858-60, Protestant missionaries began to establish mission stations in the interior of China (beyond the ports). This movement placed the American State Department in somewhat of a quandary, for the Department really had no policy regarding a situation of that kind. The treaties granted missionaries the right to own property and reside at the treaty ports, the right to travel in the interior under passport, and the right to promulgate the doctrines of Christianity anywhere in China. The State Department was prepared to support the missionary as far as these clearly defined

powers to give it, with the hostility of the Chinese who had granted freedom to missionaries in 1858 and 1860 only after they had been intimidated by the powers, one wonders whether there is not here a clear case of cause and effect. It would appear that the Christian missionary work in China did not receive a net benefit from the protection of foreign governments" (*Americans in Eastern Asia* [New York, 1922], p. 575).

rights extended, and on several occasions even demonstrated a willingness to use its influence in behalf of native Christians who suffered persecution, but, when the missionaries began, as they did, to overstep the limits allowed to them by treaty, the Department found it necessary to make gradual adjustments to the new situation.

For their part, American missionaries felt that they were perfectly justified in going beyond the bounds set for them by the Sino-American treaty of 1858. Their argument was that most-favored-nation treatment entitled them to such privileges of holding property and residing in the interior as had been accorded to the French in the treaty of 1860 and the Berthemy Convention of 1865. Strange as it may seem, the Peking government and many local Chinese officials appeared to hold a view similar to that of the missionaries, and, by tacit consent, permitted them to acquire property and establish residence at points other than the treaty ports.

For a time, under the regime of Minister Burlingame, even the American government appeared to sympathize with this interpretation of the missionary's status, and, in its desire to arrange religious matters in a congenial way, went so far as to sign a treaty with China in which reciprocal religious toleration was guaranteed and American citizens in China were assured that they "should enjoy the same privileges, immunities, and exemptions in respect to travel and residence as may there be enjoyed by the citizens of the most-favored-nation."¹⁸

Burlingame's policy and that manifested in the treaty of 1868, favorable as it was to missionaries, was not carried out by those who followed Burlingame as ministers to China. In fact, conditions of unrest in China and friction over Chinese labor problems in the United States caused American statesmen to lose faith in Burlingame's optimistic viewpoint; and they discarded his policy before it had really received a fair trial. F. F. Low, Minister to China from 1869 to 1874, declared that his opinion was "clear and decided that missionaries have no right to reside permanently away from the ports." Nevertheless, respecting missionaries already in the interior, he said, "A retrograde movement on the part of the missionaries would be impolitic now, hence I shall do what I can to keep them where they are in safety." As a representative of the United States his policy was, he said, "to secure to all our citizens, irrespective of their calling or profession, every right which an

¹⁸ Malloy, *op. cit.*, I, 235-36.

honest construction of the treaties and the well settled principles of public law would warrant." ¹³

The attitude of the American government, as further expressed by Consul E. C. Lord of Ningpo on August 15, 1873, was that it "is impolitic to claim from the Chinese government rights for missionaries not claimed for other citizens." ¹⁴ This was for many years the principle to which the State Department endeavored to hold, but from which it was slowly forced to withdraw by the very fact that missionaries continued to obtain concessions in the interior from Chinese authorities; and, when sudden squalls of anti-foreign feeling brought trouble to missionaries so located, the State Department found it necessary to spread its protecting cloak over them. Finally the State Department took the position that, in permitting missionaries to locate in the interior, China accepted the responsibility for their safety, and the *status quo* as determined by precedent and actual establishment came to be the basis of the American policy.

After 1880 the State Department was practically committed to a policy of holding China responsible for injury done to American missionaries who had been permitted to establish themselves in the interior; and, from that time until 1903, the American government, sometimes in an independent way and sometimes in coöperation with other powers, was constantly negotiating to secure guarantees of protection for missionaries in the interior and damages when they were injured or their properties destroyed.

Even in this matter a reluctance to do more for the missionary than what was done for other American citizens in China constantly manifested itself. In 1885 Minister J. R. Young wrote to one importuning missionary: ¹⁵

I do not see that the treaties can be amended to make your rights more secure. An American missionary, in the eyes of the law, is a citizen, no more. He is engaged in an honorable calling, just as if he were a banker, or a teacher of chemistry, or a tiller of the soil. So long as he observes the law, he must have the protection of the law. I think this states the whole proposition.

Fifteen years later Secretary of State John Hay made a similar statement: "The pursuits of a missionary, properly conducted, are legitimate

¹³ *For. Rel. 1873*, I, 118-19, 203

¹⁴ *For. Rel. 1874*, pp. 235-36.

¹⁵ *For. Rel. 1885*, p. 167.

and American missionaries of good standing have always enjoyed continuous protection from this Government in China." ¹⁶

These statements represent the core of the policy of the American State Department respecting missionary work in China during the last seventy-five years. To be sure, the Department has deviated from a strict interpretation of this policy; and, under the circumstance that missionaries succeeded in obtaining additional concessions from Chinese authorities, has supported them in their gains to the extent that their special privileges were written into the Sino-American treaty of 1903.¹⁷ But in so doing the American government did no more for the missionary than it would have done for other citizens if they, likewise on their own initiative, had obtained the initial privileges. After all, the policy of the American government was built up around its citizens as such, and not around missionaries or any other class. Others have noted this fact.¹⁸

By such statements as the above there is no intention to evade the fact that missionaries, more than any other group, have required the attention of the State Department to protect them from unruly mobs and to collect damages when their properties were destroyed or their persons injured. After noting all that, one historical writer of recent years has given his judgment in these words: "Nevertheless, it cannot be said that the Government of the United States has shown partiality for missionaries as against other citizens, or that it has shown any inclination to single them out for special protection." ¹⁹

The treaty of 1903, to which reference has already been made, was the first mutual official recognition on the part of the United States and China that American missionaries had the right to reside and hold property everywhere in China. In other words, it guaranteed to the missionary those rights which, in his own judgment and in the judgment of many Chinese and American officials, had long been his by

¹⁶ *For Rel 1900*, p. 393, Hay to Conger, Jan. 18, 1900.

¹⁷ Another has commented on the American policy as follows: "In the protection of missionaries in Oriental countries, the United States has avoided the example of France, Russia, Great Britain and Germany of extending their protection not only to their subjects but also to the members of Christian bodies or communities of the faiths so closely identified with their national history. The United States has followed the policy of extending protection to American citizens only or to American interests in property devoted to religious purposes." (Edward M. Borchard, *The Diplomatic Protection of Citizens Abroad or The Law of International Claims* [New York, 1928, Copyright 1915], pp. 464-65)

¹⁸ Frank E. Hinckley, *American Consular Jurisdiction in the Orient* (Washington, 1906), pp. 111-12; Benjamin H. Wilkes, "The Politics of Missionary Work in China," *Current History*, XXIII (Oct., 1925), 71-76.

¹⁹ Wilkes, *op. cit.*, p. 73.

virtue of the most-favored-nation clause of the Sino-American treaties of 1844 and 1858, and which he had gradually made effective by pre-emption.

The Treaty of 1903 bore witness to the continued interest of the American State Department in Chinese Christian converts, for it provided for toleration (with the specification that converts should obey the laws of China) and exempted them from taxation for the support of religious practices contrary to their faith. Although the American government seldom actually interfered in Chinese affairs in order to obtain justice for persecuted Chinese Christians, it has ever shown a willingness to use its good offices and its influence to that end.

For a number of years after 1903 the American government was content to uphold the *status quo* of missionary relationships in China. To this end, damages for injury to missionary properties were collected on several occasions between 1903 and 1918. During that period, however, the situation of native Christians was greatly bettered by the incorporation of a religious liberty clause into the Constitution of China. Native converts thus became less and less the subjects of American diplomatic correspondence.

Indeed, after the World War the missionary problem in China changed greatly. This was due to a change in the attitude of American missionaries toward special privileges and extraterritorial rights. Despite the very troubled condition of China and the perils and dangers to which missionaries have been subjected by banditry and civil war, there has been, since 1918, a growing sentiment among them in favor of treaty revision and the abolition of unequal rights. American business men, on the other hand, have been decidedly opposed to the relinquishment of extraterritoriality, and the American State Department has favored the maintenance of the *status quo* until China can bring about suitable reforms and a stable condition in the country.

The surprising outcome of this difference of opinion is just the reverse of the situation that existed between 1870 and 1885, when American diplomats were cautioning missionaries that they were citizens and no more, and therefore should not expect privileges not granted to other citizens. Of late, the State Department has again been reminding the missionary of his citizenship, but this time with the thought in mind that he is not permitted to repudiate the protection of his Government. "American citizens in China must be protected in accordance with the treaties, and the Government knows no distinction between missionaries and other groups of American citizens," was the

decision of the American legation in 1924, and has been the policy followed by it since.²⁰ In other words, the missionary may not forego his special rights until the American government sees fit to relinquish them for all its citizens in China.

This is nothing less than a declaration of the policy "the American missionary . . . is a citizen, no more," defined by Minister J. R. Young in 1885 but really announced by F. F. Low in 1872.²¹ Whatever deviations have been occasioned by the flux of conditions in China, the central core of the policy followed by the American government in its dealings with missionary problems there has been, and continues to be, that "the missionary is a citizen" and as such should enjoy the same privileges and receive exactly the same protection as other American citizens. The same may truly be said respecting its policy in Japan and Korea.

There are a few additional points relative to the procedure followed by the American State Department in its handling of missionary problems in China which should be summarized here. The first of these is the fact that, except for a few incidents which occurred at times of great unrest in China, it was the policy of the Department to work through the Central government of China. It is true that depredations against missionaries were usually due to a reversal of attitude on the part of local authorities who welcomed them at one time and allowed them to be mobbed at another. The State Department, however, soon learned that the proper method of handling such incidents was to hold Peking responsible and require the Central government to bring pressure to bear upon the local officials. Thus it came about that, although damages were usually paid by local authorities, all major matters followed a procedure which carried complaints from the missionary to the local American consul, thence to the American minister at Peking, and from him to the Tsung-li Yamen. The Yamen then negotiated with the local officials.

The second point which should be mentioned is the use of force to protect missionary citizens and bring about suitable indemnification when they suffered property losses. Occasions of this kind were not very numerous and, except for the Boxer expedition, they consisted of no more than the appearance of a light gunboat or an investigating commission of some kind. Indeed, recourse was had to such methods only when the Central government had revealed a marked incapacity to

²⁰ "Separate the Sword and the Cross," *Christian Century*, XLIV (Nov. 17, 1927), 1352.

²¹ *For. Rel.* 1873, I, 118-19, 201-203; *For. Rel.* 1885, p. 167.

cope with the situation. Almost invariably the American minister made repeated representations to Peking before resorting to a show of force to protect the lives and properties of American citizens. There were, however, a few emergencies in which local consuls ordered gunboat demonstrations without waiting to see what Peking would do. On the whole, the United States was much less aggressive in this matter than were other treaty powers.

Lastly, it seems appropriate to note that the present policy of the American government is to protect its nationals irrespective of their claims upon it. This cannot be called a new policy, but it has received a new significance, because, whereas throughout the nineteenth century American missionaries were not hesitant to accept the protection of their government and request it to present their claims for damages, in the opening decades of the twentieth century a growing reluctance to do this was manifested. In fact, since 1900 the American government has several times presented death and damage claims which were not specifically requested by the missionaries themselves. On other occasions it has sent protection to missionaries at exposed points, even when the missionaries made no plea for it. In other words, during recent periods of unrest in China the State Department has manifested a determination to protect all citizens and to use its own judgment as to when and to what degree protection is necessary. The logic of this course seems to be that the prestige and safety of all American citizens (merchants, missionaries, or whatever they may be) depends upon the degree of security that can be guaranteed to individual Americans who may be living at rather exposed places. Indeed, American diplomats have again and again frankly admitted that their alacrity in sending aid to missionaries in the interior has often been prompted by the need of maintaining safe conditions for the merchants at the ports.

An effort has been made to investigate all available materials relating to the subject under consideration. The bibliography furnishes a complete list of the sources and authorities consulted. These fall into the following general classes: (1) United States Government Publications, (2) Chinese decrees and memorials, (3) collections of treaties and international laws, (4) letters and journals of missionaries, (5) reports of missionary conferences, (6) histories of missionary work in the Far East, (7) standard works on international relations in the Orient, (8) oriental news as reported in the columns of the *New York Times*, (9) books and magazine articles written by missionaries, diplomats, and students of Far Eastern affairs.

December, 1937

RESEARCH STUDIES OF THE STATE COLLEGE OF WASHINGTON



BROWNING AND THE VICTORIAN PUBLIC IN 1868-69 <i>B R McElderry Jr</i>	193
THE UTILIZATION OF APPLE WASTE AND PREPARATION OF NEW PRODUCTS FROM APPLES <i>Harold W Gerrits</i>	204
A TEXT FROM NASHE ON THE LATIN LITERATURE OF THE SIXTEENTH CENTURY <i>Don C Allen</i>	205
THE EFFECT OF CERTAIN POTATO AND TOBACCO VIRUSES ON TOMATO PLANTS <i>Grover Burnett</i>	219

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BROWNING AND THE VICTORIAN PUBLIC IN 1868-69

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It has long been assumed that publication of *The Ring and the Book* in 1868-69 rescued Browning from neglect and established him as a major Victorian poet.¹ This is far from true, however, as has been shown by Mrs. Helen Pettigrew in a study of contemporary reviews and comments on the poem, recently published abroad.² Citing some forty or more literary journals in Great Britain, besides diaries and letters of the period, Mrs. Pettigrew has demonstrated that the early criticism was usually much qualified; and that in the twenty remaining years of Browning's life his masterpiece lost rather than gained in popularity and interest. Independent study of the materials, begun before I had seen Mrs. Pettigrew's discussion, convinces me that her argument and her evidence are sound. The Browningsites in their enthusiasm have magnified the contemporary effect of the poem; and in this they were aided, no doubt, by the poet himself, who in 1869 told his friend Pollock that "he had at last secured the ear of the public, but that he had done it by vigorously assaulting it, and by telling his story four times over."³

Mrs. Pettigrew's study, valuable as it is in correcting a false emphasis, leaves more to be said regarding the critical reception of *The Ring and the Book*. In this paper I wish to supplement her discussion by pointing out: first, that the critics were strongly predisposed in Browning's favor when they took up the new work in 1868-69; and second, that the sentimental appeal of the characters accounted for much of the praise accorded the poem.

First let us examine what we may call Browning's claim upon the reviewers. Even if we do not count the anonymous *Pauline*, Browning

¹"In Browning's day the poem made him a national figure. " W C DeVane, *A Browning Handbook* (New York, 1935), p. 306.

²Helen P. Pettigrew, "The Early Vogue of 'The Ring and the Book,'" *Archiv für das Studium der neueren Sprachen*, CLXIX (April, 1936), 36-47.

³*The Personal Remembrances of Sir Frederick Pollock*, II (London, 1887), p. 202. From his diary, dated April 3, 1869.

had been before the public for thirty-three years. Though, as he himself said, the British public had "liked him not," because it had found him difficult, it had recognized in him almost from the first a man of genius. And in the 1860's particularly with the publication of *Dramatis Personae* in 1864, the tide had already turned. Thus the *Westminster Review* approached *The Ring and the Book* with the following comment:

Ten years ago he was quite unknown except to the select few. We distinctly remember hearing in the winter of 1860 a well-known author, and editor of one of the most influential reviews of the day, declare that he had never read a word of Mr. Browning's poetry. And the declaration struck nobody present as at all surprising. Such a declaration, however, in the year 1869 would be a confession of ignorance.⁴

This advance in Browning's popularity *Cornhill* (February, 1869) dated from the appearance of "Caliban" (*Dramatis Personae*, 1864). This poem, thought the reviewer, "caught the upswing" of interest in poetry. Browning, Morris, and Swinburne made poetry something more than a drug on the market, as it had formerly been.⁵ In March, the *British Quarterly Review* agreed that "never before has a poet shown such conquering force over an indifferent or hostile audience."⁶ But the most emphatic recognition of Browning's position was the discussion in the *London Quarterly Review* (July, 1869). This is preceded by a bibliography of twenty-four items, described as "invaluable to the student,"⁷ from *Pauline* to the spurious Shelley letters for which Browning wrote an introduction, and *The Ring and the Book* itself. The reviewer points out many changes of text and suggests a definitive edition. Browning is described as leader of the "Psychological School" of poetry; his work must be considered as an organic whole. As the writer quaintly puts it:

Pauline is the natural ancestor of *The Ring and the Book*; these two, his earliest and latest known poems, are the terminal vertebrae of the spinal column of his work; regarded as a body.⁸

That Browning's earlier work was well known is illustrated by the numerous references and parallels in the various reviews.⁹ In short,

⁴ *Westminster Review*, XCI (January, 1869), 299.

⁵ *Cornhill*, XIX (February, 1869), 252.

⁶ *British Quarterly Review*, XLIX (March, 1869), 435.

⁷ *London Quarterly Review*, XXXII (July, 1869), 325-57.

⁸ *Ibid.*, p. 331.

⁹ A reference to *Pauline* (*London Quarterly Review*, XXXII [July, 1869], 331) I have already cited. *Paracelsus*, published 1835, is thrice mentioned. *Mac-*

one may say that by 1868 (when the third collected edition was published)¹⁰ the vital center of Browning's work had been discerned.

millan's Magazine, XIX (January, 1869), 258, reports that the new poem has "nearly all the power and subtlety of thought which went into the creation of *Paracelsus*," and the *British Quarterly Review*, XLIX (January, 1869), 248, found *The Ring and the Book* "infinitely more comprehensible" than the earlier poem. In March, XLIX, 439, the latter journal referred to *Paracelsus* as an example of "the extreme minuteness of Mr. Browning's masterly analysis." The reproach of *Sordello's* unintelligibility is only once flung at the poet (*Macmillan's Magazine*, XIX [January, 1869], 258). *Pippa Passes* is praised by both *Macmillan's* (*ibid*) and the *British Quarterly Review*, XLIX (March, 1869), 448. Of the plays, *The Blot in the 'Scutcheon* lingered in the mind of the reviewer for *Putnam's Magazine*, N.S., III (March, 1869), 370; "as a work of art pure and simple," he found *The Ring and the Book* "inferior." More moderate in its admiration, the *North American Review*, CIX (July, 1869), 281, thought *Luria* merely "an agreeable poem"; but "Browning's dramas give us analysis of characters, and developments of successive situations, not the continuous movement of life." The *North British Review*, LI (October, 1869), 103, refers to *Luria*, *The Soul's Tragedy*, and *The Blot in the 'Scutcheon* as examples of Browning's insistent contrast of the goodness of nature and the evil of artificial life.

Of the shorter poems, few published before 1855 are referred to. *Putnam's*, N.S., III (March, 1869), 370, speaks warmly of "Cavalier Tunes" (*Dramatic Lyrics*, 1842). The *Spectator*, XLII (January 30, 1869), 139, praised *The Ring and the Book* by saying "'The Flight of the Duchess' [*Dramatic Romances*, 1845] itself is not so rich and eloquent as the defence poured out by Caponsacchi of the murdered Pompilia, nor is the 'Soliloquy in the Spanish Cloister' [1845] so expressive of the spite of venomous cunning, as Count Guido Franceschini's defence of himself. . . ." The *British Quarterly Review*, XLIX (January, 1869), 248-49, says the new poem "has the fire of 'The Flight of the Duchess,'" and the *North British Review*, LI (October, 1869), 119, sees in this earlier work the germ of *The Ring and the Book*. In similar fashion the *Nation*, VIII (February 18, 1869), 136, and the *North American Review*, CIX (July, 1869), 281, draw attention to "The Glove" (*Dramatic Romances*, 1845) as representative of Browning's psychological approach to his material. In "The Bishop Orders His Tomb" (*Dramatic Romances*, 1845) the *North British Review*, LI (October, 1869), 103, saw "the quintessence of the Renaissance."

Of *Men and Women*, the collection of 1855, the following poems are incidentally referred to: "An Epistle of Karshish" which the *British Quarterly Review*, XLIX (March, 1869), 453, thought "the most thoroughly original conception of these times"; "Cleon," *Macmillan's*, XIX (January, 1869), 258; "Bishop's Blougram's Apology," *North American Review*, CIX (July, 1869), 258; "Bishop Blougram's Apology," *North American Review*, CIX (July, 1869), 281; and "The Statue and the Bust" (*ibid*, p. 283).

From *Dramatis personae* of 1864 we find mention of "Mr Sludge," *British Quarterly Review*, XLIX (March, 1869), 439; "Death in the Desert," which the same journal thought prolix but "a very noble poem" (*ibid*, p. 454); "Caliban," *Cornhill*, XIX (February, 1869), 251, and the *North British Review*, LI (October, 1869), 101.

In the favorable *Revue de deux Mondes* article, LXXXV (February, 1, 1870), 704-35, "Saul" (1845-55), "Fra Lippo Lippi," and "Andrea del Sarto" (both of 1855) were discussed at length as introductory to an analysis of *The Ring and the Book*.

¹⁰ There were earlier collected editions in 1849 and 1863 "Materials for a Bibliography of Robert Browning," in W. R. Nicol and T. J. Wise, *Literary Anecdotes of the Nineteenth Century* (London, 1895), I, 550-51. It should also

Nor was the recognition of Browning as one of the major poets of the day much marred by grudging reluctance. Nowhere is this more clear than in the repeated quotation and reference to the passage "Oh Lyric Love." Allusion to this passage was almost a rite, and it furnished the topic for many a gracious conclusion. The following from the *Edinburgh Review* (July, 1869) is typical:

To those only who have passed, like Mr. Browning, through the darkest of the valleys of the shadow of death, identity of sorrow will reveal the full pathos and significance of his noble words. But they will be precious to those who, without having experienced supreme calamity, may claim as lovers of English literature a community of sorrow with the poet, since the loss which he deploras has deprived them of one of the noblest and brightest of intellectual benefactors:—

O Lyric love, etc.²⁵

Since Mrs. Browning's death in 1861 the poet had spent most of his time in England. He was far better known than ever before. His devotion to his wife was unquestioned, and her memory belonged to the "British public" as well as to him. The romance which had once been a trifle of gossip was now touched into a tragic—or at least pathetic—beauty. The British public not only respected Browning in 1868; it wanted tremendously to love him and to like his work.

Recognizing, therefore, something of Browning's importance, respecting his perseverance during years of relative neglect, and sympathizing with the widower of England's best-loved poetess, the reviewers of 1868-69 approached a poem obviously intended as the author's masterpiece. The poem's huge bulk, its unique plan, and the device of installment publication—virtually unprecedented—all served to indicate that here was something more than just "a new book by Mr. Browning." Plainly, the time had come for a larger public to take Mr. Browning seriously, to try harder than ever before to understand him. The reviewers, therefore, set out to minimize his defects, and to convince the public of his virtues.

At first glance one is inclined to see in Browning's story an almost insurmountable obstacle to Victorian enthusiasm and approval. For

be remembered that a second edition of *Dramatis Personae* was called for within the year of 1864. *Ibid.*, p. 379.

²⁵ *Edinburgh Review*, CXXX (July, 1869), 185-86. See also *Westminster Review*, XCI (January, 1869), 299; *Macmillan's Magazine*, XIX (January, 1869), 262; *The London Review*, XVII (December 5, 1868), 620; *Cornhill*, XIX (February, 1869), 256; *Christian Examiner*, LXXXVI (May, 1869), 297; *Fraser's Magazine*, LXXX (November, 1869), 672.

few readers of *The Ring and the Book* leave the poem without surprise at the frank diction and direct handling of the theme of adultery. The contrast with Tennyson's *Idylls* ("Guenevere" appeared in 1859), and with Browning's own *Blot in the 'Scutcheon* (1843) is truly amazing. And it is an ironic fact that *Caponsacchi*, the Broadway success of 1926-27, is much more "delicate" than the "Victorian" poem on which it is based.¹²

Let us consider for a moment some of the elements of the poem which, in the common acceptance of the term, are un-Victorian. Following the chronological order of events, or alleged events, we have: Pompilia's birth as an illegitimate child, "a find i' the filth-heap," "the nameless bastard of a common whore"¹³; Guido's brutal compulsion of Pompilia; the leering suggestions of Margherita, the Franceschini servant; Guido's reproaches; his encouragement or permission of his brother's advances to Pompilia; the discovery at the Inn, as related by Guido, followed by reference to and quotation from "the letters' bundled beastliness"¹⁴; the half-jocular hearing of the court; the birth of Pompilia's child, Guido's

son and heir
Or Guido's heir and Caponsacchi's son.¹⁵

or, as Guido himself thought, "the priest's bastard and none of mine"¹⁶; and Archangeli's cynical defence:

No matter whether wife be true or false,
The husband may not push aside the law. . . ."

This is enough to recall how central is adultery in the theme of the poem, how direct and realistic is the statement. The peculiar structure of the poem, moreover, calls for insistent repetition; the "bad" parts can not be skipped or bowdlerized, as in the dialogue of a play or the chapters of a novel. Nor is there any suggestion of the hushed voice or innuendo in the repeated emphasis of the seamy side of the story. Not all the speeches are delivered before the court, but the atmosphere of

¹² In the play there is no reference to Pompilia's illegitimacy, nor to the temptation by Guido's younger brother. The diction is restrained—"bastard," "drab," and "adulteress" occurring only once each—and the single dramatic telling of the story allows a "gentler" treatment.

¹³ Robert Browning, *The Ring and the Book*, Oxford ed. (London, 1912), "Half-Rome," p. 48, l. 558; "Guido," p. 457, l. 1215

¹⁴ *Ibid.*, "Half-Rome," p. 61, l. 1126.

¹⁵ *Ibid.*, "Half-Rome," p. 67, ll. 1383-84.

¹⁶ *Ibid.*, "Guido," p. 187, l. 1531.

¹⁷ *Ibid.*, "The Book and the Ring," p. 502, ll. 694-95

the trial permeates the poem. The restrictions of "polite society" as understood in Victorian England are steadily disregarded.

What did the Victorians think of all this? It may be that they thought more than they said, but they said surprisingly little. The great majority of the reviews did not even raise the question of the poem's "morality." In its first notice, the *Saturday Review* pointed out the "intrinsic disagreeableness" of the subject.¹⁸ The *Westminster Review* noted the "Elizabethan quality of language."¹⁹ The *Christian Examiner* objected that Browning "is sometimes coarse."²⁰ *Chambers' Journal* condemned the story as "revolting," but proceeded to summarize it and to praise the poem on various grounds.²¹ The *London Quarterly Review* found that "when the poet has pared off the rags and tatters of human frailty . . . Beauty comes with edification in her train."²² The *Edinburgh Review* objected vigorously to the "mental and verbal garbage" assigned to some of the male characters, but had no doubt of "the essential purity of Browning's mind."²³ The *Dublin Review*, irritated by what it considered Browning's misrepresentation of Catholicism, was alone in censoring the book as one not "for all hands."²⁴

In contrast to this very incidental and mild censure, the one really systematic discussion was a ringing defence of Browning in the *Fortnightly*. This, surprisingly, was by John Morley, who only three years before had led the attack on Swinburne's *Poems and Ballads* in an unsigned article in the *Saturday Review*.²⁵ Writing over his own signature in the *Fortnightly* (March 1, 1869), which he then edited, Morley begins by referring to the "lamentation" which the first installment of Browning had inspired. This, he goes on to say, results from the debilitation of public taste by "graceful presentation of the Arthurian legend for drawing-rooms," et cetera. Rapidly summarizing *The Ring and the Book*, he comments on the "Shakespearean fullness,

¹⁸ The *Saturday Review*, XXVI (December 26, 1868), 833

¹⁹ *Loc. cit.*, p. 300.

²⁰ The *Christian Examiner*, LXXXVI (May, 1869), 312.

²¹ *Chambers' Journal*, XLVI (July 24, 1869), 474

²² *Loc. cit.*, p. 340

²³ *Loc. cit.*, pp. 184-85.

²⁴ *Dublin Review*, LXV (July, 1869), 62.

²⁵ *Saturday Review* (August 4, 1866); reprinted by Albert Mordell in *Famous Literary Attacks* (New York, 1926), pp. 171-84. See Edmund Gosse, *The Life of Algernon Charles Swinburne* (New York, 1917), pp. 133-63. That the article was unsigned was, of course, in keeping with the policy of the *Saturday Review*. Later, as editor of the *Fortnightly*, Morley was no doubt responsible for the policy of printing most articles under the signatures of their authors.

vividness, directness." He quotes Lessing: "there is also a beauty in drapery, but can it be compared with that of the human form?" In spite of the roughness of the poem, "a striking human transaction has been seized by a vigorous and profound imagination." Some object that the poem does not

seem to have any direct tendency to make us better or to improve mankind. This objection is an old enemy with a new face, and need not detain us, though perhaps the crude and incessant application of a narrowly moral standard, thoroughly misunderstood, is one of the intellectual dangers of our time . . . Shakespeare is never directly didactic; you can no more get a system of morals out of his writings, than you can get such a system out of the writings of the ever-searching Plato. But, if we must be quantitative, one great creative poet probably exerts a nobler, deeper, more permanent ethical influence than a dozen generations of professed moral teachers, including under the latter head such poets, too, as forgetful of their earlier skill, now strum us dolefully forth the tracts in polished verse of blameless Arthurs and prodigious Enochs. It is a commonplace to the wise, and an everlasting puzzle to the foolish, that direct inculcation of morals should invariably prove so powerless an instrument, so futile a method.²⁹

Why, we may inquire, did Morley defend Browning thus vigorously, when only three years before, he had led the attack on Swinburne? And why did Robert Buchanan praise *The Ring and the Book* in the *Athenaeum* of 1868-69, when only a year later he was to condemn the "immorality" of Rossetti's *House of Life*?³⁰ We recall, too, Thackeray's resort to cautious innuendoes in *Pendennis*³¹; the attack on Meredith's *Modern Love* in 1862³²; the furor created in the England of the early nineties, by Ibsen's plays³³; and in 1890 Hardy's necessity of having Angel Clare carry the milkmaids across the puddle in a wheelbarrow instead of in his arms—this change for magazine readers of the serialized *Tess*.³⁴ In the face of all this, how did Browning get off so easily?

As I have already shown, reviewers were predisposed in Browning's favor; they regarded him as an established writer—or perhaps, more

²⁹ *Fortnightly Review*, N.S. V (March 1, 1869), 331-43. Reprinted by Morley in *Studies in Literature* (London, 1907), pp. 255-85.

³⁰ "The Fleshly School of Poetry," *The Contemporary Review*, XVIII (October, 1871), 334-50; reprinted by Mordell, *op cit.*, pp. 185-213.

³¹ Published serially, 1848-50. See Charles Whibley, *William Makepeace Thackeray* (New York, 1903), pp. 121-23.

³² Robert E. Sencourt, *The Life of George Meredith* (New York, 1929), pp. 82-7.

³³ Miriam Alice Franc, *Ibsen in England* (Boston, 1919), pp. 24-56.

³⁴ Mary E. Chase, *Thomas Hardy from Serial to Novel* (Minneapolis, 1927), pp. 85-86.

properly, as a writer who ought to be established—and they were therefore anxious to discover virtues rather than to stigmatize faults. Moreover, Browning's treatment of adultery, though in some measure realistic and vigorous, was at the same time serious; the poet was neither flippant, nor morbidly pessimistic, nor "inflammatory." From the first it was clear that Pompilia and Caponsacchi were guiltless. Yet to younger men, like Morley, *The Ring and the Book* represented a welcome advance, a widening and deepening of literary content. Swinburne's lyrics, which Morley had so recently condemned, beckoned to schoolboys; *The Ring and the Book* invited the sober reflection of mature men. On the other hand, more conservative reviewers could agree with the writer in the *London Quarterly Review* that "Beauty comes with edification in her train." It was this which convinced most reviewers that the poem was really "moral." For if the story hinged on the unmentionable sin, if the speech of Guido was "Elizabethan," there at the very center were the blessed and spiritually victorious trinity: Caponsacchi, more vigorous than Tennyson's Arthur, but morally as impeccable; the Pope, a prelate curiously satisfying to Protestant readers who sympathized with his anachronistic doubts; and Pompilia—yes, above all, the sainted Pompilia. In the presence of these, who could denounce *The Ring and the Book* as immoral? Who—save the *Dublin Review* alone—could warn off even the youthful reader?

The emotion roused in the reviewers by Browning's characters may easily be illustrated. The *Spectator* (March 13, 1869) sang the heroine's praises as follows:

Taken as a whole, the figure of Pompilia seems to us a masterpiece of delicate power. Passionate tenderness with equally passionate purity, submissiveness to calamity with strenuousness against evil, the trustfulness of a child with the suffering of a martyr, childishness of intellect with the visionary insight of a saint, all tinged with the ineffably soft colouring of an Italian heaven, breathe in every touch and stroke of this great picture.²⁵

For the *Athenaeum* (March 20, 1869) Robert Buchanan wrote a column and a half on Pompilia's "changeable and moon-like beauty."²⁶ The *Westminster Review* (April, 1869) concluded that

Seldom has a woman been portrayed with such delicacy, such insight, and such dramatic power.²⁷

²⁵ *The Spectator*, XLII (March 13, 1869), 325.

²⁶ *The Athenaeum* (March 20, 1869), No. 2160, p. 400.

²⁷ *Westminster Review*, XCI (April, 1869), 577-78.

The *Christian Examiner* (May, 1869) was almost—but not quite—speechless:

But of Pompilia what shall we say? She seems to us a marvelous creation . . . a lasting joy in literature, a lasting inspiration to all earnest and aspiring souls.⁷⁷

Chambers' Journal (July 24, 1869) searched in vain "the whole range of English literature" for "a creation worthy of being compared with her."

Pompilia is exquisite we rise from the book feeling that we have communed with one of the finest creations of poetry, and that our souls are refined and elevated by the communion.⁷⁸

The *London Quarterly Review* (July, 1869) felt that Pompilia "will rank among the highest of the great women of art."⁷⁹

Were there no dissenting voices? There were three. The *Saturday Review* (April 13, 1869) found the heroine "too indifferent," and "hardly so perfect as the others."⁸⁰ *Macmillan's Magazine* (April, 1869) was doubtful of the result, though not, it seems, of the possibilities:

If Pompilia be compared with Margaret in "Faust," she will appear a confused and obscure image beside the clear lines of Goethe's exquisite creation. Mr. Browning's plan is partly answerable . . . But independently of this, Pompilia is too acute in her observation, too thoughtful, sometimes too satirical, for so young a girl. Yet her speech is very beautiful and very touching; and through the defects of the execution the genuineness of the conception may be doubtfully seen.⁸¹

A more searching analysis is to be found in the *North British Review* (October, 1869), treating hero and heroine together:

They are both essentially lyrical characters; and in obedience to the lyrical law, they both lack active originating power, but sit down in a boat, without oars or sails, to be luckily wafted over the wild waters of life by the breezes of good feeling and the gales of passionate instinct. Hence they lack striking originality. Mr. Browning tells us miles more about them than we are told about Hotspur or Cordelia, yet they come miles behind Hotspur and Cordelia in definiteness, dramatic energy, and elevation of individual character. Nevertheless they are real characters.⁸²

These disparaging remarks, however, are not severe. They are most respectful, and they do not rule out appreciation of the kind recorded in the eulogies quoted above.

⁷⁷ *Loc. cit.*, p. 314.

⁷⁸ *Loc. cit.*, p. 474.

⁷⁹ *Loc. cit.*, p. 356.

⁸⁰ *The Saturday Review*, XXVII (April 13, 1869), 460.

⁸¹ *Macmillan's Magazine*, XIX (April, 1869), 549-50.

⁸² *North British Review*, LI (October, 1869), 122.

As for Caponsacchi, he was to most reviewers only less admirable than Pompilia. The *Athenaeum* (March 20, 1869) turns thus from heroine to hero:

Only less fine—less fine because he is a man, less fine because his soul's probation is perhaps less perfect—is the priest, Giuseppe Caponsacchi. "Ever with Caponsacchi!" cries Pompilia on her death-bed . . . And our hearts are with him too.⁴²

Macmillan's Magazine (April, 1869), which thought Pompilia indefinite and inferior to Goethe's Marguerite, found Caponsacchi a character superior to Faust:

for Faust, though intended to be a noble character amid all his errors, must appear to those who regard him attentively to be a very weak man. He does not, from beginning to end of the poem, make one single effort at a truly magnanimous action.⁴³

To such estimates the disgruntled *Dublin Review* (July, 1869), though admitting that Pompilia was "an exquisite conception," replied that Caponsacchi is a failure. If the author meant to make a hero of him, he ought to have been less like a young English parson.⁴⁴

Guido was, on the whole, accepted as a worthy foil to the noble hero and heroine. The *Christian Examiner* (May, 1869) found him a villain "that has never been produced in literature before."⁴⁵ The *Saturday Review* (April 3, 1869), which had only moderate enthusiasm for Pompilia, praised hero and villain together:

Caponsacchi and Guido are Mr. Browning's most signal triumphs. We question if, since the great dramatists of the Elizabethan age, English poetry has ever produced characters so solid, so complex, so carefully thought out. How superior is Guido to Count Cenci, in Shelley's play! Cenci is a motiveless monster. . . . It is true of [Guido], what is perhaps true of every real human being, but what is not found in the exaggerated villains of novelists, that in spite of all his degradation we may admire somewhat in him—namely, the courage and coolness with which he conducts his defence.⁴⁶

But no matter how much the reviewers might admire Guido's courage and coolness, they were never puzzled about his character. Like hero and heroine, he was idealized, and in his own way he, too, flattered the sentiments of the time. Good and evil remained unmistakable, as the

⁴² *Loc. cit.*, p. 400

⁴³ *Loc. cit.*, p. 550.

⁴⁴ *Loc. cit.*, p. 61.

⁴⁵ *Loc. cit.*, p. 312.

⁴⁶ The *Saturday Review*, XXVII (April 3, 1869), 461

Victorians wished them to be. *Macmillan's Magazine* (April, 1869) thought "the villany ascribed to Guido one of an improbable nature," but praised warmly the power of the character, particularly in the second speech.⁴⁶ And it is in the second speech, we remember, that Guido is made to confess at last his own evil nature.

Regarding the Pope as a character there was little detailed discussion, though his philosophical reflections were much admired and liberally quoted. Morley, for instance, found in the Pope's monologue a fine example of Browning's courageous facing of reality.⁴⁷ The *Edinburgh Review* (July, 1869) saw in the Pope a kind of philosophical hero; commenting on the great variety of human nature represented in the numerous characters of the poem, the reviewer finds that all the rest serve as a background for the noble three:

to set off against all this superlative and subordinate villainy, this humdrum of the commonplace . . . this professional insincerity and greed—to set off against these, and vindicate the majesty of human nature, stand forth Pope Innocent in all the clarity of wisdom, of Christian fortitude and grace; Pompilia in the purity, the sweetness, of womanly innocence; Caponsacchi in the full brightness of spiritual chivalry, a passionate pure knight of God.⁴⁸

This sentimental appreciation of the characters of the story goes far to explain such favorable criticism as *The Ring and the Book* received. It is doubtful, however, that the characters would have been thus appreciated had the poem been published fifteen or even ten years previously. For in an odd way *The Ring and the Book* was a timely work. In 1868 Browning was—at least among the critical—an established author who merited respectful consideration. By 1868, too, the anti-Tennyson movement was under way, as is clearly indicated by Morley's invidious comparisons.⁴⁹ Browning's poem, with its realistic treatment of adultery and its sentimentalized characters, was at once liberal and safe. These advantages, however, were not sufficient to make the poem "succeed" in any large or general sense. The reviewers of 1868-69, though they praised the author and admired his characters, were skeptical of the poem on artistic grounds. They worked hard at the task of enjoying *The Ring and the Book*, but they were conscious that they had not entirely succeeded.⁵⁰

⁴⁶ *Loc. cit.*, p. 547.

⁴⁷ *Loc. cit.*, p. 341.

⁴⁸ *Loc. cit.*, p. 179.

⁴⁹ See above, note 26.

⁵⁰ In a future paper, I plan to show how well they diagnosed the reasons for the poem's partial failure.

THE UTILIZATION OF APPLE WASTE AND PREPARATION OF NEW PRODUCTS FROM APPLES¹

HAROLD W. GERRITZ

Utilization of additional quantities of the fruit produced in this state is an important problem to the fruit industry, inasmuch as a considerable portion of the fruit produced is not marketable on the fancy-fruit market under present conditions. A number of new methods of utilization of fruit were developed during the course of this work. It was shown that a good grade of pectin² could be prepared from immature fruit which is ordinarily wasted. Immature apples were found to be rich in pectin, which could be extracted with 0.5 per cent hydrochloric acid. Utilization of this pectin showed it to be of high quality.

It was also shown that calcium gluconate could be prepared from the juice of cull and surplus apples.³ Mold fermentation converted a large portion of the glucose to gluconic acid. A number of organisms may be used, but the most efficient was *Penicillium purpurogenum*. Calcium gluconate is being increasingly used in human and animal feeding and for other purposes, and may provide a valuable outlet for a portion of the fruit crop.

A new fruit concentrate was developed which may furnish an outlet for a large quantity of C grade and other edible fruit which does not meet the fancy-fruit market standards. The process is also applicable to the concentrating of other fruits and vegetables. The concentrate may be reconstituted by the addition of water to form a food product which is essentially identical with fresh fruit.

Progress was also made on the development of other fruit products. Further work is being done in this laboratory on the utilization of fruit sugars.

¹ Abstract of a dissertation submitted in partial fulfillment of the requirement for the degree of Doctor of Philosophy in Chemistry, State College of Washington (1934).

² H. W. Gerritz, "Extraction of Pectin from Apple Thinnings," *Ind Eng Chem.*, XXVII (1935), 1458.

³ Clifford Frost, J. L. St. John, and H. W. Gerritz, "Calcium Gluconate from Juice of Cull and Surplus Apples," *Ind Eng Chem.*, XXVIII (1936), 75.

A TEXT FROM NASHE ON THE LATIN LITERATURE OF THE SIXTEENTH CENTURY¹

DON C. ALLEN

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"Homer of rats and frogs hath heroiquit it; other oaten pipers after him in praise of the Gnat, the Flea, the Hasill nut, the Grashopper, the Butterflie, the Parrot, the Popinjay, Phillip sparrow, and the Cuckowe. . . . Phylosophers come sneaking in with their paradoxes of povertie, imprisonment, death, sicknesse, banishment, and baldnesse, and as busie they are aboute the bee, the storke, the constant turtle, the horse, the dog, the ape, the asse, the foxe, and the ferret. . . . The posterior Italian and Germane cornugraphers sticke not to applaude and cannonize unnaturall sodomitie, the strumpet errant, the goute, the ague, the dropsie, the sciatica, follie, drunckennesse, and *slovenry*."

"The Prayse of the Red Herring"²

"Drunkenesse of his good behaviour
Hath testimoniall from wher he was borne,
That pleasant worke *de arte bibendi*,
A drunken Dutchman spued out few yeares since
Nor wanteth sloth (although sloths plague bee want)
His paper pilliers for to leane upon.
The praise of nothing pleades his worthnesse.
Pollie Erasmus sets a flourish on."

"Summers Last Will and Testament"³

These quotations from Thomas Nashe will serve as a text for a sermon on a literature which was popular in his day but is neglected in our own. These allusions of his are, in the main, to the Latin *facetiae* literature with which many a serious and learned writer of the sixteenth century beguiled his leisure hours. Some of these references are, as McKerrow has stated, to works of classical provenience, an occult-enough origin for the twentieth century. The major portion of the allusions are, however, to contemporary compositions, the works of men of taste and erudition. Like the classical codices which slumbered for so long in mediaeval trash-bins, these writings, covered with the patina of oblivion, have been exiled to the shelves of libraries for almost three centuries. Many of them are justly banished, for time is, after all, the best literary critic; but in most instances these compositions have a potential value as interpreters and commentators for the literature that time has spared.

¹ The material for this essay was gathered while the author was a fellow of the American Council of Learned Societies.

² *Works* (McKerrow, London, 1910), III, 176-177

³ *Ibid.*, III, 278.

One of the most recurrent denominations for the sixteenth century in northwest Europe is "the Renaissance," a term which was coined, if memory does not fail, by Vasari, who writes in his preface that he proposes to treat "della rinascita di queste arti sino al secolo che noi viviamo."⁴ Michelet probably gave the word its greatest currency in the seventh volume of his history, which appeared in 1855 with the title *Histoire de France au seizième siècle. Renaissance*; and though he defines that tag-word in many ways, the definition that caught in the minds of scholars like a burr in a sheep's flank is, "la renovation des études de l'antiquité."⁵ For at least three generations, we have been hearing of the infatuation of the sixteenth century with classical models and ideals. Scholars of a certain type have suggested with due seriousness that Shakespeare read Hesiod in Greek; Lyly's loans from the Greek of Plutarch is the subject of a profound memoir; and Spenser has been charged with reading almost every Greek from Dionysus Halicarnassus to Dionysus Thrax. In the same way and with ampler justice, the dependence of the Tudor writers on the literature of Roman culture has been rigorously exposed. We know that Sir Julius Caesar carried a cabinet of Elzevir classics with him when he went abroad on diplomatic missions; but we have a vague feeling that, outside of the ordinary school classics, the vast Siberias of Roman letters was *terra incognita* to the ordinary Elizabethan. There is really little cause for haling Lampridius or Ammianus Marcellinus to the witness box; Virgil, Ovid, Cicero, and Plautus have had their day in court. But although we are convinced that the ordinary Elizabethan had no extraordinary knowledge of Latin letters, we are by no means persuaded that he was a tyro in the Latin language. The driving purpose of sixteenth century pedagogy was to teach the Latin tongue as a living form of expression, as a medium of exchange that was as important to the merchant and statesman as to the poet and scholar. Such training could not but beget proficiency.

A material result of this callidity is the congratulatory Latin verse which appears in a variety of meters as part of the preface to most sixteenth century publications in the vernacular. The writing of Latin poetry and the composition of Latin epistles and essays was the practice of a gentleman; in fact, it was, to a great extent, the *impresa* of a gentleman. Is it illogical, then, to assume that the sixteenth century

⁴ *Delle Vite de' più eccellenti pittori, scultori, ed architettori* (Roma, 1759), p. 2.

⁵ *Op. cit.*, p. 6.

Englishman of the upper class read contemporary efforts in the Latin language and was influenced by them? If it is illogical, the printers of this age were philanthropists, for they printed as many verses and essays in Latin as they did in the vernacular. In drama and prose romance the productions in the vulgar surpass those in Latin, but these are the literary forms of the people and must be written in the popular language and sold for a popular price.

Now, the discomfiting fact is that this contemporary Latin literature has been completely forgotten except for that of a few prominent writers like Pontanus, Sannazzarus, and Buchananus. For aesthetic reasons some of it is rightly unremembered; for as Ausonius and his contemporaries are distinctly below Virgil and his fellows, so this literature is often inferior to that of the silver age. It must, however, have been read in its age; and if it was read, it may have had an influence. Moreover, to the historian of ideas the measurements of the aesthete are only one factor in delineating the intellectual circumference of a cultural epoch, for he would leave no borough unnamed in the chart of human experience. With this motive prompting, the literature indicated by Nashe has been inspected so that a sort of museum exhibit of its essential nature might be prepared. For no moment must we entertain the illusion that Nashe was deeply read in this literature; nor should we search too strenuously for its influence on him. His references to these works suggest that they were known to him in a general way, but what is known to one man by title may be read by another.

Nashe's allusions separate themselves into two basic categories, for they are concerned with poetical and philosophical compositions on animals and philosophical and poetical essays on paradoxical matters. Some of these allusions may be references to the classics. Ovid composed verses about the parrot and nut; Virgil about the gnat, horse, and bee; Statius about the parrot; Meleager about the grasshopper; Catullus about the sparrow; and both Claudius and Ausonius about the horse. So much the classics provide—and exhaustive investigation might possibly add a trifle more—but these sources are slight in number when we measure them by the sixteenth century publications in these genres. We shall first be concerned with the poetical and philosophical compositions on natural history which may have been known to Nashe.

Besides the pseudo-Ovidian poem on the flea, in which the little insect is lectured for troubling young girls in their sleep, although the

poet is not averse to exchanging forms and opportunities with it,⁶ there are verses by Boechellus,⁷ Scaliger,⁸ Brisonius,⁹ Mangotius,¹⁰ Angerianus,¹¹ Calcagninus,¹² Taubermanus,¹³ Siberius,¹⁴ and Frencellius¹⁵ in which a flea is the principal actor. Most of these verses were probably inspired by the similarity in sound between *puella* and *pulex* and are envious accounts of the amorous privileges enjoyed by fleas and denied to lovers. It is, then, not surprising to learn that a female poet of the period, Catherine des Roches, had written a poem on this subject and that the poems of the learned and quarrelsome J. C. Scaliger and of Mangotius are inspired by her verses. Donne, as we know, composed a profane lyric on the same subject at a subsequent time. Other of the poems are mock heroic epitaphs on fleas that have been slaughtered by their hosts in the approved manner. Boechellus' verses which are obviously drawn in imitation of the pseudo-Ovidian "De Pulice" are perhaps the most whimsical of all. They open by portraying the flea as a little minister of Cupid that excites with its pigmy black mouth the "ignes sepultos." The methods by which Jupiter once wooed his immortal mistresses are then related; Europa was beguiled with the assumed form of a bull. Now, says Boechellus, the god has grown more cautious but is still given to his old habits; he has taken to donning the form of a flea that,

"Quo tutiorem pusa recipiat sinu,
Angustiores facilis & rimas petat."

The poem concludes with a berating of Jupiter and the ordering of the fair cohorts in Virgilian array.

"Quo tendis, ô summe, ô Panomphe Jupiter?
Pusille Pulex Jupiter? Nymphas tuas
Devirginari fraudibus? fata haec sinunt?
Apage beatus virgini adstabat chorus,
Acie ocularum Lynceo valentior,
Solem tenebris in opacioribus
Potens videre. Pulci tum inducitur

⁶ C. Dornavius, *Ampitheatrum* (Hanoviae, 1619), I, 27.

⁷ *Loc. cit.*

⁸ *Ibid.*, I, 28.

⁹ *Ibid.*, I, 27-28.

¹⁰ *Ibid.*, I, 28-29.

¹¹ *Ibid.*, I, 29-30.

¹² *Ibid.*, I, 30.

¹³ *Loc. cit.*

¹⁴ *Loc. cit.*

¹⁵ *Loc. cit.*

Certamen hic Heroico incedit pede;
 Alter Phaleuco adulterum versa impetit
 Hic unguibus tenax premit. . . ."

After so much of this, Jupiter seeks the "aeternas domos," but leaves in the poem many phrases from the *Aeneid*.

In spite of the popularity of the pseudo-Virgilian *Culex*, the gnat was not as frequently the object of Neo-Latin poetry as the flea. Perhaps the later poets feared to compete with the master; perhaps the nature of the gnat did not allow so many startling conceits. As amber in which gnats were encysted was highly prized in the era as jewelry, it is not astonishing to find two poems in acknowledgment of a gift of this sort. A poem by Joannis Jacomotus rings various changes on the eternity of this form of sepulcher, and one by Christopherus Manlius merely lauds the gift and the giver.¹⁶ Among other poems inscribed to this insect, we have Politianus' "Culicis encomium," which, after the manner of the flea poems, deals with the love liberties of gnats;¹⁷ and the lines of Calcagninus on the gentleness of the gnat,¹⁸ which closes with,

"In reliquis fraudem atque astum causabere, nemo
 De culicis poterit vulnere juri queri"

The height, or perhaps the depth, of insect poetry was reached on the occasion of the death of a pet grasshopper belonging to a lady of Holland. Gulielmus Canterus, the classical scholar, pronounced a funeral oration,¹⁹ and Jacobus Eyndius penned an epicedium.²⁰ In the latter verse, Death is rebuked for striking the sweet head of the grasshopper, which was small in stature but tall in virtue. Its fair voice and gay dancing are highly commended, and all the elements of the classical threnody, including the ascent to the stars, are present.

Because of the vogue of the parrot poems of Statius²¹ and Ovid²² and the immortal lines of Catullus²³ on the sparrow of Lesbia, the Neo-Latins rhapsodized these birds not infrequently. In imitation of the Ovidian theme, the eminent Theodorus Beza wrote a poem beginning

¹⁶Ibid., I, 117.

¹⁷Ibid., I, 116.

¹⁸*Carmina Illustrum Poetarum Italorum* (Florentiae, 1719), III, 73.

¹⁹*Dornavius, op. cit.*, I, 124.

²⁰Ibid., I, 125.

²¹*Silvarum*, II, 4.

²²*Amores*, II, 6.

²³*Liber*, II, III.

with the same lines.⁸⁴ The subject of this poem is a parrot that died of sorrow for its master's lingering suffering; the poem concludes with these moral but somewhat cynical lines.

"Fallor, an ex hominum infidus nunc coetibus, exul
Ad genus hoc volucrum fugit amicitia."

A most interesting and lengthy poem on a pet parrot, Memmus, who had reached its fifth luster, was written by the animal poet, Johannes Passeratius.⁸⁵ The author narrates various incidents in the life of the bird, describes its plumage and habits in detail, and closes by promising it as many more poems as "Quot tibi formoso vernant in corpore plumae." Perhaps the best poem in this group is Titius Stroza's "Ad Psittacum,"⁸⁶ in which the poet, weeping for the loss of his Phillis, is disturbed by the parrot calling her name. Then realizing his own irrationality and the parrot's share in his grief, he says,

"Perge precor, Dominaeque tuo communis utrique
Semper adorandum nomen ab ore sonet
Atque utinam in saevo pietas tua vulnere fiat,
Tam dulci eloquio Pelias hasta mihi"

Further poems on the parrot, which seems to have been pleasantly and curiously regarded in this era, were written by Petrus Totichius⁸⁷ and Joannes Toscanus.⁸⁸ The verses of Catullus bred a progeny of lines on the sparrow. A poem on a dead sparrow appears in the works of both Passeratius and Johannes Auratus;⁸⁹ Benedictus Jovius is responsible for two epigrams on caged sparrows; ⁹⁰ Nicholas Vando-peranus tells of the non-Catullian death of a sparrow that pined for its absent mistress;⁹¹ and Joannes Posthius draws an epicure's lesson from the brief life of the sparrow:⁹²

"Disce me fato, longum qui vivere quaeris
In Veneris iustum rebus habere modum."

Joannes Secundus, who was a sort of sixteenth century Catullus, has, quite naturally, several sparrow poems;⁹³ but the most amazing per-

⁸⁴ Dornavius, *op. cit.*, I, 370

⁸⁵ *Ibid.*, I, 370-371.

⁸⁶ *Carmina Illustrium Poetarum Italorum*, IX, 154-155.

⁸⁷ Dornavius, *op. cit.*, I, 371

⁸⁸ *Carmina Illustrium Poetarum Italorum*, IX, 352

⁸⁹ Dornavius, *op. cit.*, I, 460

⁹⁰ *Loc. cit.*

⁹¹ *Loc. cit.*

⁹² *Ibid.*, I, 461.

⁹³ *Opera* (Parisiis, 1561), pp. 72r-v.

formance of all is the "Passer; sed non Catullianus" of the ponderously named and ponderously handed German poet, Tobias von Schwanensee und Bregoschitz.³⁴ This *opuscula*, which runs to more than 160 wooden-legged hexameters, celebrates the similarities between sparrows and men. Both sin and practise virtue, and God peers after each and pulls the supernal strings. In a sense, this poem is symptomatic of the anti-cupid poetry of the more sober-minded, study-sheltered poets of the sixteenth century.

The philosophic essays on natural history join hands with these poems to treat the same subject matter, although the approach is obviously different. Led by the example of Virgil,³⁵ a number of Neo-Latin poets³⁶ wrote odes to bees; but owing to the ordinary limitations of verse, these achievements are trifling in comparison with the essays on the same subject. Michaelis Maierus, who had a certain place as a scientist, is the author of a pleasing "Oratio:Apis,"³⁷ in which he treats of the nobility, chastity, quickness, valor, and innocence of bees. He describes their love of music and applauds them for the benefits they convey to men. Not the least of these benefits is the example they give of the highest type of statescraft, and, as it was an age of absolutists, this insect precedent was ever stressed. Another essay on bees, the "Apicula," was written by Michaelis Gehlerus,³⁸ who invokes the scholastic method to demonstrate the piety, industry, order, chastity, and concord of bees. Though Nashe mentions the bee alone as the insect subject of the philosophers, there are essays extant on the louse,³⁹ the ant,⁴⁰ the flea,⁴¹ the spider,⁴² the gnat,⁴³ the fly,⁴⁴ the beetle,⁴⁵ the lo-

³⁴ Dornavius, *op. cit.*, I, 461-462.

³⁵ *Georgica*, IV.

³⁶ Nathan Chytracus, "Rex Apum"; Gabrielis Lerneus, "In Apes Innoxias"; and Georgius Gallichrudimenus, "De Apibus."

³⁷ Dornavius, *op. cit.*, I, 147-148.

³⁸ *Ibid.*, I, 148-151.

³⁹ Danielis Heinsius, *Laus Pediculi ad conscriptos mendicorum patres*

⁴⁰ Erasmus Ebernus, *Encomium Formicarum*; Michaelis Gehlerus, *Epistolae de Formica*

⁴¹ Caellius Calcagninus, *Encomium Pulicis*; Petrus Gallissardus, *Pulicis Encomium*

⁴² Ulysses Aldrovandus, *Aranei Encomium*

⁴³ Gilbertus Bancherellus, *De Culice*.

⁴⁴ Ulysses Aldrovandus, *Musca*.

⁴⁵ C. Dornavius, *Scarabaeus Encomium*

cust,⁴⁶ the worm,⁴⁷ the grasshopper,⁴⁸ the silkworm,⁴⁹ and the firefly.⁵⁰ The insect kingdom caused no more speculation than one would expect in an age of open houses.

From the time of Aristotle and Pliny, the stork was praised for paternal piety and the dove for conjugal faith. Neo-Latin poets like Cornelius Musius⁵¹ and Gullielmus Salustius⁵² extol the virtues of the former, whereas Joannes Passeratius⁵³ and, fittingly enough, Fridericus Taubmanus⁵⁴ hymned the devotion of the latter. These patterns were also accepted by the essayists. Casparus Heldelinus in his extended "Ciconia Encomium"⁵⁵ exhausts the classical sources for material on the stork, a bird familiar to his native land. In this essay, the nature of storks and the historical and literary appreciations of storks leads inevitably to a dissertation on the duties of man to God. Casparus Cichocius⁵⁶ is the author of an essay on doves in which Biblical references are turned to good account and the habits of doves become the occasion of didactic similes.

Familiar animals were the objects of numerous sixteenth century Latin treatises. Nashe mentions philosophic writings on the horse, dog, ape, ass, fox, and ferret, but there were also essays on the hedgehog,⁵⁷ elephant,⁵⁸ calf,⁵⁹ cat,⁶⁰ porcupine,⁶¹ and rabbit.⁶² The pig received facetious attention in sausage-loving regions. There is, for example, a long heroic poem, the *Pugna Porcorum per P. Portium Poetam*,⁶³ in which every line begins with a "p"; and an amusing German travesty entitled *Excellentz Triumph und Herrligkeit dess Schweins*,⁶⁴ in which the spectators sing Latin hymns like this one,

⁴⁶ G. Canterus, *In Gryllum*

⁴⁷ Ulysses Aldrovandus, *Laudes Vermium*

⁴⁸ Ulysses Aldrovandus, *Cicadae Encomium*

⁴⁹ Michaelis Bayerus, *Bombycis*

⁵⁰ Michaelis Gehlerus, *Cindela*

⁵¹ Dornavius, *op cit*, I, 451

⁵² *Loc cit.*

⁵³ *Ibid*, I, 377

⁵⁴ *Ibid.*, I, 378.

⁵⁵ *Ibid*, I, 439-448

⁵⁶ *Ibid*, I, 378-379.

⁵⁷ Justus Lipsius, *In Echium*

⁵⁸ Justus Lipsius, *Elephantus Encomium*

⁵⁹ Michaelis Malerus, *Vituli Oratio*.

⁶⁰ G. Canterus, *In Falem Florae Viduae Oratio*

⁶¹ C. Claudianus, *Hystrix*

⁶² Titius Strozza, *De Lepore*.

⁶³ Dornavius, *op cit*, I, 599-601.

⁶⁴ *Ibid.*, 585-599.

"Vivat porcus, vivat, vivat,
 Vivat porcus delicatus:
 Vivat porcus tam gratus
 Gentibus, populisque ubique.
 Vivat porcus, vivat, vivat."

Without question the complete menagerie was written about at some time during this period, but Nashe names the animals that were frequently the subject of philosophic prose.

Two philosopher-scholars, Simones Grynaeus and Justus Lipsius, wrote little essays on the horse in possible imitation of Nicomachus' funeral oration on the horse, Oribates. Grynaeus' "De Equo Elogium" treats of the nobility of the horse and its God-given benefits to struggling man.⁸⁸ Lipsius, a professional historian, devotes most of his "Encomium" to historical anecdotes about horses and their use and draws some parallels between the curbed horse and the bridled man.⁸⁹ The dog, as a household pet, was the constant subject of Latin essays and oftentimes of funeral orations. An oration was pronounced in 1535 by Jacobus a Moshaim over the carcass of a bitch named Rudbertia,⁹⁰ and another was declaimed by Canterus over the dog, Leonteus.⁹¹ In both orations we find a general praise of dogs followed by particular references to the dead dog. The finest essay on "man's best friend" was written by Lipsius,⁹² who informs us that his parents always had several dogs and that he was never without one. The essay encloses the usual classical *impedimenta*, but, unlike most essays on these subjects, it has frequent references to Lipsius' favorite dog, Mopsus, which add a familiar tone to the piece. The epitaphs and funeral verses that Lipsius had composed for his favorite dogs—Saphyrus, Mopsulus, and Mopsus—are given at the end of the essay; the epitaph written for Mopsus is worth repeating:

"Mopus Canis, Gente Scotus, Colore Grasso Spadiceo:
 Sed Circa Oras Aurium, Et In Ipso Oredilutius Flavo.
 Super Oculum Utrumque Orbiculi Aequales Duo, Itidem
 Flavi Idem Color in Pedibus, Interioribus, Intra
 Femora Sub Cauda, Et In Ano At Pectus Latum Et
 Honestum, Pantherina Prorsus Specie, Album Et Maculis
 Spadiceis Sparsum, Tales Ipsi Impedes Annum Agit
 Tertium, Ad Invidiam Pulcher."

⁸⁸ *Ibid.*, I, 487-488.

⁸⁹ *Ibid.*, I, 488-491.

⁹⁰ *Ibid.*, I, 506-509.

⁹¹ *Ibid.*, I, 514-515.

⁹² *Ibid.*, I, 521-524.

The philosophic praise of the ass has its inception in many places. The *Golden Ass* of Apuleius was popular among the advanced scholars of Nashe's day, and the panegyric of Cipolus on the ass, Ponocrates, was known in Canterus' Latin version. The early seventeenth century was to see Danielis Hernsius' *Lous Asini* dedicated to "Senatum Populamque eorum, qui ignari omnium, scientias hoc tempore contemnunt." Melancthon,⁷⁰ Lauterbachius,⁷¹ Maioris,⁷² and Wildebramus⁷³ glorified the ass in verse. Two Latin essays felicitating the ass have come down to us. The first of these, by Cornelius Agrippa, constitutes the last chapter of the *De Incertitudine et Vanitate Omnium Scientiarum et Artium* and is styled the "Ad Encomium Asini Digressio."⁷⁴ Agrippa descants at length on the historical, literary, and religious reputation of the ass. He tells us, for instance, that asses' bones make the best flutes. Chiefly the ass reminds him of the scholar which its Hebrew name *hochma* suggests, for:

"Eius namque conditionis sapientiae discipulo, necessariae maxime sunt, vivit enim exiguo pabulo, eoque qualicumque contentus, tolerantissimus penuriae, famis, laboris, plagarum, negligentiae, omnisque persecutionis patientissimus simplicissimus ac pauperrimus spiritus, ut ne inter lactucas & carduos discernere sciat, corde innocenti ac mundo, ac bili carens cum omnibus animantibus pacem habens, omnibusque oneribus patienter dorsum supponens, in quorum remunerationem caret pediculis: raro morbis afficitur, tardiusque quam ullum armentum deficit."

The other essay, Passeratius' "Asini Encomium,"⁷⁵ is compiled from classical history and mythology and lacks the Agrippanesque flourish. In these accounts, we obtain an idea of the conventional essays of this type; and there is little need to amplify these illustrations with further examples, for an equally interesting group of essays pose themselves about the paradoxes mentioned by Nashe.

Before turning to the prose paradoxes, we shall profit by studying the poetical *De Arte Bibendi*, which, according to Nashe, "a drunken Dutchman spued out few yeares since." Had Nashe been less certain of his nomenclature, we could assume that he was referring to the *Bacchi Apologia* of Andreas Arnaudus, the *In laudem Ebrietatis* of Christopherus Hegendorphinus, the *Pro Ebrietate* of Gerardus Bucol-

⁷⁰ *Ibid.*, I, 500.

⁷¹ *Ibid.*, I, 501.

⁷² *Ibid.*, I, 502.

⁷³ *Ibid.*, I, 502-503.

⁷⁴ *Op. cit.* (Francofurti et Lipsiae, 1693), pp. 563-570

⁷⁵ Dornavius, *op. cit.*, I, 499-500.

dianus, the *Declamatio ebriosi contra scortatorem*, and the *Scortatoris et aleatoris recriminatio adversus ebriosum* of Philipus Beroaldus, or some chapter on the same subject in a work like Johannes Stuchius' *Antiquitatum Convivialium*. His reference fits, as McKerrow observes, the *De Arte Bibendi* of Vincentius Obsopoeus; but his assumptions about the nature of this work show a clear ignorance of its contents.

The *De Arte Bibendi* is a three-part poem of about fifteen hundred lines. The purpose of the poem is to teach the right use of wine, and the attendant sin of *gulosus* is eschewed at once:

"Non erit in nostro carmine lurco bibax:

Non turpis comedo, non ebrietate frequenti " "

Such practises are only for "foedos porcos." The major purpose of the poem is three-fold: to teach drinking at home, drinking among a few friends at home or in a tavern, and drinking at public banquets and festivals. A book of the poem is given over to complete instruction in each of these three phases. In other words, the poem is a sort of conduct book in which the evils of intoxication are emphasized and the pleasures of moderate drinking described. To the hard-drinking sixteenth century, this poem came more as a temperance pamphlet than as a Baedeker to temulency.

Like some of the poetical *jeu d'esprits* that we have previously mentioned, a number of the philosophic paradoxes are of classical or mediaeval origin and, consequently, outside the scope of this essay. The paradoxes of poverty, death, imprisonment, sickness, and banishment are part of the stoic theme and can be found scattered through the writings of Seneca and his disciples. Baldness, as McKerrow notes, was praised by Synesius Cyrenensis in his *Phalakkas Eglomion* and is the subject of a series of verses, all lines of which begin with "c," by the curiously elusive monk Hucbaldus. The sixteenth century produced a *libellus* on hair by Hadrianus Junius and numerous essays on beards, but the glazed scalp does not seem to have been a popular essay topic.

By far the most mirth-provoking of these Latin essays are those on drunkenness which have already been mentioned in connection with Nashe's misinformation about the *De Arte Bibendi*. The volume of essays on this subject suggest that a vigorous temperance movement was under way; and we wonder what, in that age of dubious plumbing, one was expected to drink if wine was prohibited. An account of one

"*Op. cit.* (Lugduni Batavorum, 1648), p. 2.

of these paradoxical essays should give the reader a thirst for the others; and of all of them, the *In laudem Ebrietatis*¹⁷ of Hegendorphinus is the most suitable for description and summary. To give his essay an orthodox tone, the author begins by mentioning the examples of Noah, Lot, and Jacob. From Israel he passes to the Greeks, listing the three drinking laws of the Symposium: drink or go away; drink three or five glasses but never four; and scorn a cautious drinker. He ascertains the saturation point of the Romans, Egyptians, and Saxons, awarding the palm to the latter because when they were drunk, they made the inebriates of other races seem sober. He informs us that a good Saxon will get drunk on any public holiday, and that he will take advantage of any private celebration for copious imbibing. The virtues of drunkenness, he says, are that it cures or mitigates ailments, increases and stimulates loquacity, for Homer loved wine and a drunk parrot is startlingly verbose, fathers truth and eliminates puerility, and induces fortitude and valor. In the closing sections of the essay, Hegendorphinus controverts passages in the Gospels or Pauline Epistles against drunkenness by either quoting contradictory texts or by propounding an interpretation favorable to drinking. The essay is garnished with literary allusions and antiquarian anecdotes that enhance its stylistic charm.

As Naashe's remarks suggest, the sixteenth century philosophers contrived numerous paradoxical essays on the stylish diseases of the age. The gout, as one of the more aristocratic diseases, is the frequent source of learned fun. In a *Podagrae Laus*,¹⁸ Bilibaldus Birckheimerus, "a Germane cornugrapher," sketches the plea of the gout before a court of law. After a circuitous prelude in the contemporary legal manner, the gout points out that her accusers are not men accustomed to labor and spare diet, but those who live at ease and have the earth searched for delicacies. The Kings, Popes, and rich merchants who compose the prosecution forget that Venus and Bacchus should be charged in the same bill. Gout herself has many estimable qualities. She protects her victims from the dangers of travel and war and stays them indoors when the weather is bad and the footing uncertain. She has also a moral influence, for by her the proud are made humble, the wicked pious, and the dishonest honest. For these reasons and many others, she should be acquitted. There are other equally amusing

¹⁷ Dornavius, *op. cit.*, II, 28-31.

¹⁸ *Ibid.*, II, 202-208.

essays on this disease. Pontanus invented a dialogue between the gout and the stone;⁷⁹ Cardanus composed an essay in which the gout is described as a human benefactor;⁸⁰ and Joannes Carnarius pronounced a panegyric on the gout at Padua in 1552.⁸¹ The other widespread ailment of the century, the quartan or ague was celebrated by Ulrich von Hutten in two Latin dialogues between himself and the disease.⁸² In both of these dialogues, we hear much about the sixteenth century physicians and their drugs, of the use of rhubarb and hellebore, and the various causes, treatments, and complications of the ague. The fever, which is naturally the livelier character of the two, has an Olympian scorn for all mortal attempts to suppress it.

"The praise of nothing pleads his worthiness." In this line Nashe mentions a form of essay that was exceptionally popular among the Neo-Latins. Besides exercises on Nothing, we have essays on All,⁸³ Something,⁸⁴ No one,⁸⁵ Bagatelles,⁸⁶ and Small,⁸⁷ as well as on more earthy subjects like Cheese,⁸⁸ Paper,⁸⁹ Mirrors,⁹⁰ Dirt,⁹¹ Thresholds,⁹² and Shadows.⁹³ Among the *facetiae* on *Nihil*, we have what seems to be a mock determination oration for the Baccalaureate pronounced by Cornelius Gotzcius before the famous astronomer, Rudolphus Goclenius.⁹⁴ The suppliant demonstrates the importance of Nothing in and by all the phases and jugglery methods of the Aristotelian plan. A more humorous essay on this subject was written by Franciscus Portus,⁹⁵ the poet, who discusses, after a preface in which he tells of his meeting with this deity in Germany in 1572 and her importance there, the antiquity and multiple powers of this word. Starting with the theological concept that the matter of creation was *nihil*, he runs a gamut of word-plays on that noun. What was prior to God? Nothing.

⁷⁹ *Ibid.*, II, 214-215.

⁸⁰ *Ibid.*, II, 215-219.

⁸¹ *Ibid.*, II, 219-223.

⁸² *Ibid.*, II, 176-183.

⁸³ Ernestus Bamfus, *Omnis*.

⁸⁴ Christopherus Colerus, *Aliquid et Nihil*.

⁸⁵ Johannes Grobius, *De Nemine*, Ulrich von Hutten, *Nemo*.

⁸⁶ J. Passeratius, *Nugae*.

⁸⁷ Erycius Puteanus, *Parvorum Encomium*.

⁸⁸ Bartholomeus Bollus, *De Casei Stupendis Laudibus*.

⁸⁹ Conradus Rittershusius, *De Charta*.

⁹⁰ Eberhart von Weyhe, *De Speculi Origine, Usu et Abusu*.

⁹¹ Joannes Maioragius, *Luti Encomium*.

⁹² Johannes Companus, *Liminis Encomium*.

⁹³ Janus Douss, *In Laudem Umbrae*; Joannes Wovwerus, *Dies Aestiva, sive de Umbra*.

⁹⁴ Dornavius, *op. cit.*, II, 730-733.

⁹⁵ *Ibid.*, II, 737-739.

What is more potent than God? Nothing. What do God and the angels fear? Nothing. Those who are blind can see Nothing; those who are deaf can hear Nothing; and those who are without hands can touch Nothing. If one cannot eat, one can still eat Nothing; if one has no money, one still has Nothing. This concept, says Portus, is so striking that philosophers agree that all came from Nothing and that all will return to Nothing. At any rate, when all else has passed away, Nothing will remain, for it cannot perish.

These are but a few specimens of the lost literature of the sixteenth century, and they have been consciously limited to Nashe's references. The Neo-Latins gave us no Shakespeare; but they gave us some Spensers and Sidneys and an infinite number of Greenes, Lodges, and Lylys, who have all passed into obscurity because of the negligence of scholars and the death of the language in which their works were written. The pity of it rests in the fact that the majority of these writers were cultured men of superlative learning and fancy, who wrote for an audience of their peers. That they should be forgotten by the plain citizen, by the "hydra headed multitude" is in harmony with cosmic principles; but that they should be disregarded by the historian of ideas and the amateur of the literary arts is as incomprehensible as it is disastrous. How can we arrive at a just definition of the spirit of the Elizabethan age when we are ignorant of more than half of its literature and essential ideology?

"But," the opposition will say, "these men were reactionary, for they wrote in a dead language when the native tongue had ripened to harvest." If, in one's scholarly simplicity, one can think only of the ploughman and artisan, this is a telling argument. In a plebiscite, it has a clear majority; the intellectual royalists are always snowed under by the party ever in power. To the intellectual aristocrats of the Tudor age, the Latin language, in which they wrote and thought, was still a living language; in fact, it was the only language in which there was a tradition. When the language passed into exile, the tradition remained. We find few reliques of *Beowulf*, *Cynewulf*, and Langland in Shakespeare, Milton, and Keats; their themes are the eternal ones of Greece and Rome. It is incredible that we should have stood so long in the ranks of the dark angels forgetful of the living literature of the sixteenth century. If this essay has vivified in any way the Latin literature of Shakespeare's age and indicated its value as an aid to the study of the vernacular offerings in verse and prose, it has fulfilled its ultimate purpose.

THE EFFECT OF CERTAIN POTATO AND TOBACCO VIRUSES ON TOMATO PLANTS¹

GROVER BURNETT

Experimental results are presented showing the effect of certain potato and tobacco viruses on tomato plants when used alone or in various combinations.

Tests were made to determine the prevalence of the latent virus in potato plants produced from commercial tubers as well as from true seed. Of the 655 tubers tested, representing six commercial varieties, only one was found to be free from the latent virus. The latent virus was not present in the 52 seedling potato plants that were tested. Progeny of the healthy tuber showed no resistance to the common virus diseases; hence it is probable that the healthy tuber had merely escaped infection.

The veinbanding virus plus the virulent latent virus produced spot necrosis of tomato and tobacco and produced symptoms very similar to rugose mosaic of potato.

A discussion is presented of the preliminary results on the effect of various viruses upon healthy and veinbanding-virus-infected Early Rose potatoes. When potato plants carrying the veinbanding virus were inoculated with the virulent latent virus, symptoms very similar to rugose mosaic were produced. The progeny from the virus-free Early Rose potato when inoculated with rugose mosaic produced typical rugose mosaic symptoms. When tobacco mosaic was added to rugose mosaic and inoculated to plants affected with the veinbanding virus, a more severe type of rugose mosaic was produced than when rugose mosaic alone was used as the inoculum. However, the inoculation with tobacco mosaic on plants already affected with rugose mosaic did not affect the rugose symptoms expressed by the plant.

The Early Rose potato plants carrying the veinbanding virus showed a mild type of rugose mosaic when inoculated with inoculum from potato plants affected with crinkle mosaic, leaf roll, or spindle tuber (all carrying the latent virus).

¹ Abstract of a dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Plant Pathology, State College of Washington (1931). Published as "The Effect of Certain Potato and Tobacco Viruses on Tomato Plants," *Wash. Agr. Exp. Sta. Bul.* 259 (1932) and "The Longevity of the Latent and Veinbanding Viruses of Potato in Dried Plant Tissue," *Phytopathology*, XXIV (1934), 215-227.

The virulent latent virus produced a mild mottle with some necrosis on one of the virus-free Early Rose potato plants. The virulent latent virus plus the veinbanding virus on the virus-free Early Rose potatoes, produced rugose mosaic symptoms including stem streak and leaf necrosis.

The virulent latent virus in combination with the crinkle mosaic virus (carrying a mild latent virus) often produced much milder symptoms on potato, tomato, or tobacco than did the virulent latent virus when used alone. The latent virus from crinkle mosaic seems to produce an inhibitory effect on the expression of the virulent latent virus.

The veinbanding virus was not as readily transmitted mechanically as was the latent virus

Tests show that it is not practicable to use macerated tuber tissue in testing for the presence of the latent virus.

The latent or virulent latent virus was found to be present in forty-eight tubers that showed symptoms of the following virus diseases: crinkle mosaic, leaf roll, spindle tuber, super-mild mosaic, mild mosaic, unmottled curly dwarf, rugose mosaic, and witches' broom.

Inoculum from apparently healthy potatoes (carrying the latent virus) produced similar symptoms on tomato and tobacco plants as did inoculum from potato plants carrying leaf roll, spindle tuber, or crinkle mosaic; and rugose mosaic inoculum gave additional symptoms of chlorosis and spot necrosis. When tobacco mosaic was added to inoculum from any of these sources, streak of tomato and leaf necrosis of tobacco were produced.

Fresh inoculum from potato plants produced a higher percentage of infection on tomato and tobacco plants than was secured when the inoculum was dried for different periods of time.

The latent virus when used alone or when combined with the tobacco mosaic virus remained active in dried tomato, tobacco, or potato seedling tissue for at least 46 days. This virus also remained sufficiently active in tomato plant tissue which had been dried 466 days to insure a 20 per cent infection.

The latent virus appeared to be the only virus transmitted mechanically to tomato or tobacco from potatoes that were apparently healthy or that were affected by leaf roll, spindle tuber or crinkle mosaic; whereas the veinbanding virus, in addition, was transmitted from potatoes affected by rugose mosaic.

The veinbanding virus commonly remains active ten days in dried plant tissue and was found to remain active in dried tobacco leaf tissue for forty-six days.

It is apparent that the latent or virulent latent virus is capable of producing a lethal effect on tomato, tobacco, or potato and that this lethal effect is materially intensified when found in combination with tobacco mosaic.

It appears that, under field conditions, tobacco mosaic may be spread by insects and mechanical means, and that the latent virus is spread only by mechanical means.

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